

# SMOKE SIGNALS

For Radio Amateurs • By Radio Amateurs

Published Monthly Since 1969 • Our 28th Year

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## Hales Corners considers tower moratorium

*New tower problem prompted by letter of complaint from neighbor of ham*

**Rick Kissell, WB9GYT**  
Milwaukee Area Correspondent

Shortly after arriving home from work on Thursday, September 4, Jerry Scherkenbach, N9AW, was visited by a neighbor who showed him an article clipped from the "Neighbors" section of the southwestern suburbs edition of that day's *Milwaukee Journal-Sentinel* titled "Guidelines Sought on Use of Antennas".

The article, by Journal-Sentinel correspondent J.R.S. Owczarski read, in part:

"The Planning Commission has recommended a moratorium on radio and television antennas constructed above and attached to roofs until the village can establish guidelines for the structures.

"The action came after a ham radio enthusiast in the 11300 block of W. Bridget Lane constructed a 48-foot tower with cross pieces ranging in width from 12 to 14 feet.

"Village President James Ryan said he was sure the tower was legal and would

remain, but he wanted the board to take a look at the effect these structures have on their neighbors.

"He said he has heard questions about what their appearance would do to surrounding property values and whether a radio signal sent from these towers could interfere with the operation of nearby phones and other communication devices.

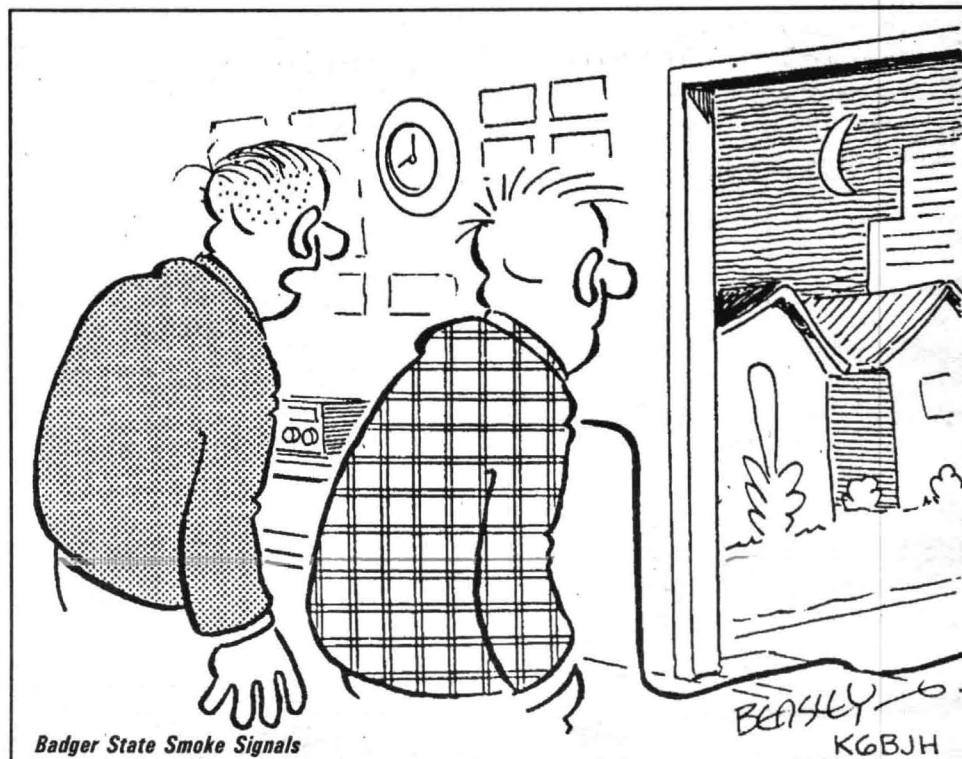
"It seems to me that we have to find a way to stop this from happening until we figure out what we want to do," he said.

"Building Inspector Ronald Chamness said that, in his 17 years with the village, this new tower -- put up within the last two weeks -- is only the second he's seen. The other was originally built in a much more remote area.

"Free-standing towers are covered by a separate section of the village's zoning code.

"The full board is scheduled to meet Tuesday."

*Please turn to page 9*



Badger State Smoke Signals

THEY MADE ME MOVE MY ANTENNA OUTSIDE THE CITY LIMITS---THAT'S PROBABLY WHY MY LINE LOSSES ARE SO BAD

## College Station Installs Aerial

From *The Spectator*, Eau Claire Teachers College, c. 1928

W-9WND, short-wave station of Eau Claire Teachers College, will be able to communicate with a greater number of stations in foreign countries this year, now that new equipment has been added to the college station's facilities. Two steel antennae, lifted 45 feet high, and several short-wave receiving sets are included in the new equipment.

After remarking that station W-9WND has the best college short-wave radio equipment in the state with the exception of that of the University of Wisconsin, Dr Judd of the faculty invited all underclassmen to visit the

station. The Radio club, meeting every Monday during assembly time, offers valuable training for those interested in radio work, he said.

The project for the Radio club has not been chosen yet, but discussion of radio are now being held for the members. Many college students here have received help from the club in obtaining operator licenses.

- *Spectator Staff Reports*,  
1928

Thanks to Dr. Tom King, Ph.D.,  
WF9I, UW/Eau Claire

## Open records law reveals Hales Corners tower complainant's gripes about amateur towers being "unbelievable"!

On October 7, Rick Kissell, WB9-GYT, used the state's Open Records Act to force the Village of Hales Corners to release a copy of the letter of complaint that sparked off all this controversy. Three days later, Rick received a copy of the letter (along with an invoice for 25 cents for photocopying fees!) It was dated July 19 and addressed to Hales Corners Village President James R. Ryan. Its text follows:

"Dear Mr. Ryan:

"I would like to call a concern of mine to the attention of the Hales Corners Board of Trustees. Last week I was startled to look out of my side window and see that my neighbor was erecting a radio tower that was to stand 48 feet high, just thirty feet from my property line. Upon inquiry, I was amazed to find that there is no zoning code that prohibits such a structure in the residential areas of our village. Perhaps this should not have surprised me since another nearby neighbor had recently constructed a two-story structure in his back yard, and had build his own bridge on village land over the creek that flows into Whitnall Park.

"When relating these incidents to friends who live in other suburbs, e.g., Mequon, Wauwatosa, Whitefish Bay, etc., they find it unbelievable that these kinds of actions could occur. Since it is believable in Hales Corners, and I seem to be unable to seek any recourse, I do believe that the Board of Trustees should review residential

zoning regulations to assure that these kinds of structures do not continue to appear in our community.

"My concerns deal with safety (the tower structure being blown over in a windstorm), aesthetics (the tower will be an eyesore in the midst of a community of single story residences), with the possibility of interference to our telephone, radio, and television reception (this has already happened from a much shorter antenna), and property value (I wouldn't want to buy a home next to a 48 foot tower).

"In my case this seems to be a fait accompli, but I would encourage the board to enact safeguards to protect other citizens from similar circumstances. We used to sympathize with residents of Greenfield and other less-enlightened communities for their lack of zoning regulations. Perhaps it will soon be the reverse. I encourage you to remedy this problem before it expands exponentially.

Sincerely,  
(name withheld by BSSS)"

- Via Rick Kissell/WB9GYT

*Editor's note: The "unbelievable" towers to which Mr. Anderson refers have been used since the beginning of Amateur Radio around 1915. It should also be noted that Amateur Radio, including towers, is shown clearly by legal precedent to be considered a normal use of household property.*

**See "Mayors Praise Ham Radio", page 8**

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# WHAT'S HAPPENING

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✕ Amateur Radio Exam Schedules

Edited by Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901 • kebnetter@palacenet.net

## Swapfests and Other Social Events

**SATURDAY, NOVEMBER 1, 1997.** 13 annual "6.91 Friendly Fest", sponsored by the Milwaukee Repeater Club, at the Waukesha County Expo Center Forum, N1 W24848 Northview Rd, I-94 to County J, South to FT, West to Expo Center. Waukesha, WI. Contact: The Milwaukee Repeater Club, PO Box 2133, Milwaukee, WI or N9VBI, Burt, (414) 328-0535. Web page: \\www.expcpc.com/~mrc/friendlyfest.htm

**SUNDAY, NOVEMBER 2, 1997.** Fox Cities ARC, Kaukauna, WI. Held at the Starlite Club, corners of Highway 55 and County Road JJ, North of Kaukauna. VE testing, food, refreshments, great deals. Contact: Chad Pennings, N9PRC, 1912 Russet Ct. Apt. #7, Appleton, WI 54914. (920) 993-0485. (See ad for additional information.)

**SATURDAY & SUNDAY, NOVEMBER 15-16, 1997.** Fort Wayne Hamfest at Allen County War Memorial Coliseum Exposition Center, For Wayne IN. Contact: ACARTS, PO Box 10342, Fort Wayne IN 46851. (219) 484-1314.

**SUNDAY, JANUARY 11, 1998.** 26th annual Midwinter Swapfest, sponsored by the West Allis Radio Amateurs Club, Waukesha County Expo Center Forum, Waukesha, WI. Contact WARAC Swapfest, PO Box 1072, Milwaukee, WI 53201.

**SUNDAY, JANUARY 25, 1997.** Wheaton Community Radio Amateurs annual Midwinter Hamfest and Electronic Flea Market at the Odeum Exposition Center in Villa Park, Illinois from 8:00 a.m. to 2:00 p.m. Contact: WCARA, PO Box QSL, Wheaton, IL 60189 or web page: www.w9cuu.org

**TUESDAY, FEBRUARY 24, 1998.** Red Cedar Repeater Association Auction. Contact: Steve Hart, KA9OMC, E616 810th Ave., Knapp, WI 54749-9020. (715) 665-2374.

**SUNDAY, MARCH 8, 1998.** SEWFARS Swapfest, Waukesha County expo Center, Waukesha, WI. Contact: SEWFARS Inc., PO Box 102, Delafield, WI 53018, (414) 358-1003.

**SUNDAY, MARCH 15, 1998.** Tri County Hamfest 1998, Jefferson WI. Contact TCARC, 213 Frederick St., Fort Atkinson, WI 53538. (920) 563-6381.

**SUNDAY, APRIL 5, 1998.** Madison Swapfest. John Q Hammons Trade Center. Contact: MARA, PO Box 8890, Madison, WI 53708-8890. (608) 245-8890.

**SATURDAY, MAY 2, 1998.** Ozaukee Radio Swapfest. Contact: Ozaukee Radio Club, W58 N985 Essex Drive, Cedarburg, WI 53012-1439.

**SUNDAY, JUNE 7, 1998.** Adams County Hamfest. Contact: Nick Segina, WB9YKK. (608) 339-9014.

**SUNDAY, JUNE 7, 1998.** 21st annual CWRA Swapfest, U.S. Army Reserve Center, Junction City, WI. Contact: John Feltz, WA9JN, 973 E First St., Junction City, WI 54443-9614. (715) 457-2506. e-mail jfw9jn@tznnet.com

**SATURDAY, JULY 11, 1998.** South Milwaukee Amateur Radio Club Swapfest, South Milwaukee, WI. (414) 762-3235.

See also the back page and flyer ads for additional information on many of these events.

Let us know of your dates as soon as you know them. We will list them and perhaps help avoid conflicts with other events.

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or

other event of interest to Radio Amateurs in Wisconsin and nearby areas. Send information on your event to Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages. For information on rates and requirements for our advertising pages, please contact K9ZZ or K9EN.



## CLUB MEETINGS

Due to space limitations, we cannot always carry the full listing of Wisconsin and area club meetings. Please see the October 1997 meetings column for the latest complete listing. No changes have been reported to BSSS since that listing.

## The Test Point



**Amateur Radio Examination Locations  
and Schedules in the Wisconsin Area**

November 01, 1997	Menomonie, WI
November 01, 1997	Oshkosh (Omro), WI
November 01, 1997	Racine, WI
November 01, 1997	St. Paul, MN
November 02, 1997	Kaukauna, WI
November 06, 1997	Apple Valley, MN
November 08, 1997	Blaine, MN
November 08, 1997	Madison, WI
November 08, 1997	Oak Creek, WI (MRAC)
November 15, 1997	Cottage Grove, MN
November 15, 1997	Loves Park, IL
November 15, 1997	Milwaukee, WI (BE)
November 15, 1997	Redgranite, WI
November 19, 1997	Eden Prairie, MN
November 19, 1997	Sheboygan, WI
November 22, 1997	Bloomington, MN
November 29, 1997	Milwaukee, WI (MRAC)
December 06, 1997	Hudson, WI
December 06, 1997	Oshkosh (Omro), WI
December 06, 1997	Racine, WI
December 06, 1997	Stevens Point, WI
December 06, 1997	St. Paul, MN
December 11, 1997	Apple Valley, MN
December 13, 1997	Blaine, MN
December 13, 1997	Madison, WI
December 13, 1997	Marshfield, WI
December 13, 1997	Marshfield, WI
December 13, 1997	Oak Creek, WI (MRAC)
December 13, 1997	Redgranite, WI
December 16, 1997	Eden Prairie, MN
December 20, 1997	Cottage Grove, MN
December 20, 1997	Loves Park, IL
December 20, 1997	Milwaukee, WI (BE)
December 27, 1997	Bloomington, MN
January 03, 1998	Oshkosh (Omro), WI
January 03, 1998	St. Paul, MN
January 08, 1998	Apple Valley, MN
January 10, 1998	Blaine, MN
January 10, 1998	Eau Claire, WI
January 10, 1998	Oak Creek, WI (MRAC)
January 17, 1998	Cottage Grove, MN
January 17, 1998	Loves Park, IL
January 17, 1998	Milwaukee, WI (BE)
January 17, 1998	Sheboygan, WI
January 19, 1998	Madison, WI
January 20, 1998	Eden Prairie, MN
January 24, 1998	Appleton, WI
January 24, 1998	Bloomington, MN
January 31, 1998	Milwaukee, WI (MRAC)

## Badger State Smoke Signals

**Amateur Radio  
Education and Information**

**CHAIRMAN:** Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901. Telephone (608) 742-3560. kebnetter@palacenet.net

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**EDITORIAL BOARD:** Ken Ebnetter, K9EN; Dave Knaus, WA9POV; Don Evenson, K9JYX; Jim Romelfanger, K9ZZ.

### Subscriptions

1 year	(12 issues)	\$13.95
2 years	(24 issues - save \$1.95)	\$25.95
3 years	(36 issues - save \$3.90)	\$37.95

Special club package reduced rates are available. For information, contact Ken Ebnetter, K9EN.

### When to Send It

The closing date for each issue is the first of the month for the next month's issue. For example, the closing date for the June issue is May 1. The only exception is for participating clubs' minutes. Participating clubs are requested to send their material no later than FIVE DAYS after the club's meeting. For example, if a club meets on the 4th of the month, the material should be sent no later than

the 9th of that month. This material is to be sent to the Editor.

### Where to Send It

Address changes and corrections should be sent to Ken Ebnetter. Editorial material, photographs, feature articles, display ads, and exchange papers should be sent to Jim Romelfanger.

Inquiries about advertising should be directed to Ken Ebnetter. Club, swapfest, and Test Point information should be sent to Ken Ebnetter.

Swapfest ads should be sent to Jim Romelfanger NO LATER THAN EIGHT WEEKS BEFORE THE EVENT'S DATE.

Subscriptions should be sent, with check or money order, to Jim Decker.

### Conditions for Reprinting or BBS Posting Material from Badger State Smoke Signals

Permission is hereby granted to reprint articles or posting articles on radio or telephone bulletin boards from *Badger State Smoke Signals*, providing credit is given to the original author, publication in which the article first appeared, and to *Badger State Smoke Signals*. **THIS CREDIT IS MANDATORY, AND NO MATERIAL MAY BE PRINTED OR POSTED UNLESS IT IS GIVEN.**

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*Badger State Smoke Signals* is incorporated as a Wisconsin non-stock, non-profit organization.

### Editorial Disclaimer

The opinions expressed in editorials, guest editorials, columns, articles, and letters from readers are the opinions of the authors only, and do not, unless otherwise stated, express or imply endorsement by *Badger State Smoke Signals*, or by any other individual or organization.

January 31, 1998 Tomahawk, WI  
 February 07, 1998 Oshkosh (Omro), WI  
 February 07, 1998 Racine, WI  
 February 07, 1998 St. Paul, MN  
 February 12, 1998 Apple Valley, MN  
 February 14, 1998 Blaine, MN  
 February 14, 1998 Madison, WI  
 February 14, 1998 Oak Creek, WI (MRAC)  
 February 17, 1998 Eden Prairie, MN  
 February 21, 1998 Cottage Grove, MN  
 February 21, 1998 Loves Park, IL  
 February 21, 1998 Milwaukee, WI (BE)  
 February 28, 1998 Bloomington, MN  
 February 28, 1998 Milwaukee, WI (MRAC)  
 February 28, 1998 Tomahawk, WI  
 March 07, 1998 Oshkosh (Omro), WI  
 March 07, 1998 Racine, WI  
 March 07, 1998 St. Paul, MN  
 March 12, 1998 Apple Valley, MN  
 March 14, 1998 Blaine, MN  
 March 14, 1998 Madison, WI  
 March 14, 1998 Oak Creek, WI (MRAC)  
 March 17, 1998 Eden Prairie, MN  
 March 18, 1998 Sheboygan, WI  
 March 21, 1998 Cottage Grove, MN  
 March 21, 1998 Loves Park, IL  
 March 21, 1998 Milwaukee, WI (BE)  
 March 28, 1998 Bloomington, MN  
 March 28, 1998 Milwaukee, WI (MRAC)  
 March 28, 1998 Tomahawk, WI  
 May 16, 1998 Sheboygan, WI  
 July 15, 1998 Sheboygan, WI  
 September 12, 1998 Sheboygan, WI  
 November 18, 1998 Sheboygan, WI  
 Monthly, 1st Sat. Racine, WI  
 (except January, July & August)  
 Monthly, 1st Sat. Oshkosh (Omro), WI  
 Monthly, 1st Sat. St. Paul, MN  
 Monthly, 2nd Thu. Apple Valley, MN  
 Monthly, 2nd Sat. Oak Creek, WI (MRAC)  
 Monthly, 2nd Sat. Madison, WI  
 Monthly, 2nd Sat. Blaine, MN  
 Monthly, 3rd Tue. Eden Prairie, MN  
 Monthly, 3rd Sat. Milwaukee, WI (BE)  
 Monthly, 3rd Sat. Loves Park, IL  
 Monthly, 3rd Sat. Cottage Grove, MN  
 Monthly, 4th Sat. Bloomington, MN  
 Monthly, Last Sat. Milwaukee, WI (MRAC)  
 (except December)  
 Monthly, Last Sat. Tomahawk, WI  
 (January thru October only)  
 Quarterly Marshfield, WI  
 (Second Saturday every third month.)  
 Quarterly Eau Claire, WI  
 (Second Saturday Jan., Apr., & Oct.)  
 plus annual summer hamfest.)

Many Swapfests/Hamfests offer exam sessions. If not shown above contact the sponsoring club in the Swapfest column on page 2.

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

#### GENERAL RULES FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Some examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL. Send a 32c/ SASE if you request one from the ARRL. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$6.25 payable to "ARRL/VEC".

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE or CSCE to the VEC. You must also have two good copies of your license or CSCE. A copy of your license or CSCE must be attached to your FCC form 610 and most VEC want a copy for their records. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

For those with internet access, a listing of exam sessions is available from:

<http://www.arrl.org/arrlvec/examsearch.html>

By checking this page, a person can find out registered VE sessions anywhere in US and some overseas. You can

search by country, state or zip code. The listing is not specific to any particular VEC, it is a master database. (Thanks to KB9EQI for information.)

#### MILWAUKEE RADIO AMATEURS' CLUB (MRAC/VEC) SECOND SATURDAY - OAK CREEK, WI LAST SATURDAY - MILWAUKEE, WI

SECOND SATURDAY DATE: 1:00 p.m. to 3:00 p.m. at Wauwatosa Savings Bank, 6560 S. 27th St., Oak Creek, WI.

LAST SATURDAY DATES: (except December): 9:00 a.m. to 12:00 noon at Amateur Electronic Supply (AES), 5710 W. Good Hope Rd., Milwaukee, WI. Note: For Additional Information: Call (414) 466-HAMS (Answering Machine).

Bring along your ORIGINAL license, CSCE (if any) and one (1) good quality photocopy of each, plus two forms of identification, such a driver's license, etc. Also required is \$6.25 for the exam fee. WALK-INS are welcome. To register in advance, use a post card: Print the grade of license you are applying for, your name, address, and telephone number. Send the card to MRAC/VEC, Milwaukee Radio Amateurs Club, PO Box 25707, Milwaukee, WI 53225.

#### BADGER EXAMINERS (BE) - MILWAUKEE

Badger Examiners group now testing at AES (Amateur Electronic Supply) at 6th and Good Hope, every third Saturday MORNING. Exam times are not 9:30 a.m. to 12:00 noon, at the old Sterman Printing ship, just 300 feet west of the AES store. Novice to Extra are offered, and all test materials are provided, fee is \$6.25, and bring your original license, or CSCE if needed. Also available are Commercial license exams GROL (General Radiotelephone license), GMDSS, Telegraph, Etc. Fee is \$35.00. For more information call Gary Sharbuno, WI9M at (414) 355-0237.

#### MADISON, WI

VE exams are held in Madison every second Saturday morning of the month at 8 a.m. They are held at the operations building of the Madison Metropolitan Sewerage District at 1610 Moorland Rd. To get there take the Beltline (Hwy 12 & 18) to South Towne Drive. Go south 8/10 mile till South Towne Drive makes a bend and becomes Moorland Rd. and enter at gate.

You should bring a picture ID, your original licence and a copy of your licence. For exams beyond the novice tests, bring a check for \$6.25, made out to the ARRL/VEC. If the special 610 form with the medical exemption is required, contact me beforehand to obtain one. No appointments are necessary to take exams. For further questions, please leave a message on the mailbox or phone me at (608) 832-6631.  
Mark Jenks. NZ9B

#### RACINE, WISCONSIN - ARRL/VEC

Monthly - first Saturday, except January, July, and August.

Monthly exams are given 9:00 to 11:00 a.m. at the Red Cross Building, 4521 Taylor Avenue, Racine. Walk-ins are permitted.

Talk in on 147.87/27. Inquiries and registrations should be directed to Robert N. Jensen, W0WLN, 5616 Cambridge lane #6, Racine, WI. Telephone (414) 886-8551.

#### TOMAHAWK, WI

Last Saturday of every month. Jan. thru Oct.

Tomahawk Volunteer Examiners (ARRL/VEC). Tomahawk, WI. No preregistration required, but appointment would be appreciated. Registration at 8:30 a.m. and testings starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Terry Collins, KB9AUP, W6564 Highway 8, Tomahawk, WI 54487. Telephone (715) 453-4633.

#### APPLETON, WI - ARRL/VEC

#### MANITOWOC, WI (HAMFEST)

#### KAUKAUNA, WI (HAMFEST)

Conducted by the Fox Cities ARC VE team. All test sessions in Appleton are held at James Madison Jr. High, 2020 S. Carpenter Street. Testing starting at 8 a.m. For Appleton information, contact George R. Croy, W9MDP, 2113 Twin Willows Drive, Appleton, WI 54914. (920) 730-0967. For Manitowoc or Kaukauna information, contact Larry Siebers, KD9IA (920) 759-1167.

#### STEVENS POINT, WI (ARRL/VE)

Held in room 107, of the UWSP Science Building, on the corner of Fourth and Reserve Streets in Stevens Point. Contact Joe Larson, N9JW evenings at (715) 344-1182.

#### PEWAUKEE, WI

Kettle Moraine Exam Team. Held at the Pewaukee WCTC Campus Science Building, Room S101. 9:00 a.m. to Noon. Contact Al Johnson, AA7CS. (414) 568-0836. 103357.3222@COMPUSERV.COM

#### OSHKOSH (OMRO)

The Oshkosh VE Team will administer Amateur

Radio exams monthly on the first Saturday. Registration begins at 8:30 a.m. and exams will be given from 9 a.m. until noon at the Omro Community Center, 130 W. Larrabee, Omro, WI. Walk-ins welcomed. Bring a good quality photocopy of your original license and any other necessary documents such as a CSCE, etc. The first session will be through W5YI/VEC, and then sessions will alternate between ARRL/VEC and W5YI/VEC. The exam fee is \$6.25. For more information, please call Dick Lemme, K9FA, at (920) 235-0987, e-mail lemme@vbe.com, or write Dick at 826 Jefferson Street, Oshkosh, WI 54901.

#### EAU CLAIRE

The Eau Claire ARC will hold exam sessions on the second Saturday in the months of January, April, and October, as well as on the date of their annual hamfest during the summer. For further information contact: Carl F. Searing, W9NW, 1129 Mc Kinley Road, Eau Claire, WI 54703-2219. (715) 834-1303.

#### REDGRANITE, WI (W5YI/VEC)

The Radio Amateurs of Wisconsin (RAW) will be holding test sessions at the Civic Center in Redgranite, 202 Pine River Road, one block from Highway 21. Registration at 8:45 a.m. with testing at 9:00 a.m. Bring two forms of identification, \$6.25 per test, two copies of all original documents, CSCE's, Licenses, etc. All are welcome for breakfast at the Curve Inn on Highway 21, preceding the exam session. For further information, contact: Mark Miller, N9WT, (920) 231-1662 or Sharon Gramza, N9YGN, (920) 566-2362.

#### MENOMONIE, WI

The Menomonee, WI VE team will conduct its 1997 exams on Saturday, Saturday, November 1, 1997. At UW-Stout Communication Center, 820 South Broadway, Menomonee, WI. Walk-ins only, 9:00 a.m. to 11:00 a.m. Contact: Jim Ley, NX9F, (715) 232-1397 (W) or (715) 235-3998 (H).

#### WISCONSIN DELLS, WI

Wisconsin Dells City Hall, City Council Chambers. 10:00 a.m. to 2:00 p.m. Contact: K9WD, (608) 254-2895.

#### HUDSON, WI

Testing is held at the St. Croix County emergency government Center on Carmichael road in Hudson, WI. Registration begins at 8:00 a.m. and testing begins promptly at 9:00 a.m. Contact: Greg Miller, KB9JHL, 503 4th St., Hudson, WI 54016. (715) 386-9857.

#### MARSHFIELD, WI (ARRL/VEC)

Sponsored by the Marshfield Area ARS. Held at St. Joseph Hospital, 611 St. Joseph Ave., in the 1 West classroom located adjacent to the Westwood Cafeteria on the main floor of the hospital. Use the main entrance or any other entrance and follow the signs to the cafeteria. Registration starts at 8:30 a.m. with testing starting at 9:00 a.m. Talk in on the 147.18 Marshfield repeater. Walk-ins welcome. Contact: Walter Friant, WB0KIN, 2310 Wallonie Drive, Marshfield, WI 54449 (715) 387-3870.

#### SHEBOYGAN, WI

Wednesday dates: Registration 1830 hrs, testing 1900 hrs.

Saturday dates: Registration 0830 hrs, testing 0900 hrs.

Testing site is: Red Cross/Boy Scout Office Building (lower level), 2032 Erie Ave., Sheboygan, WI.

Test site has limited handicap accessibility. Walk-ins are OK but preregistration would be appreciated. Test fee is \$6.25. Make checks payable to SCARC VE Testing. All class tests administered. Contact: Art Pahr, K9XJ, (920) 876-2370. e-mail <k9xj@excel.net>

#### PEWAUKEE, WI (ARRL/VEC)

Contact: Rodger Bradley, AA9OJ. (414) 691-3089.

#### ARLINGTON HEIGHTS, IL (ARRL/VEC)

Contact: Frank Stankiewicz, (847) 437-1464.

#### CEDARBURG, WI - ORC HAMFEST

#### EAU CLAIRE, WI - ECARC HAMFEST

#### GREEN BAY, WI - ARES HAMFEST

#### HAYWARD, WI - HAYWARD HAMFEST

#### KAUKAUNA, WI - SWAPFEST

#### MANITOWOC, WI, LAKESHORE HAMFEST

#### MARSHFIELD, WI - HAMFEST

#### OAK CREEK, WI - SMARC HAMFEST

#### RACINE, WI - RACINE HAMFEST

#### RHINELANDER, WI - NWARC SWAPFEST

#### ROCKFORD, IL - RARC HAMFEST

#### ROTHSCHILD, WI - WVRA HAMFEST

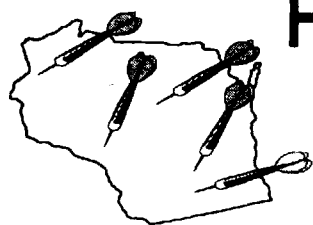
#### SOUTH MILWAUKEE, WI - SMARC HAMFEST

#### STEVENS POINT, WI - CWRA SWAPFEST

#### WAUKESHA, WI - MIDWINTER SWAPFEST

#### DUBUQUE, IA - HAMFEST

(continued on page 15)



## HERE and THERE

### First issue of *The Heathkit Technical Journal* off the press

A new publication *The Heathkit Technical Journal*, edited and published by Rob Hummel, WA9ZTY, Marshall, Wisconsin, is now available.

Dedicated to Heathkit ham radio products, the first issue offers articles on "Bringing Home Your DX-100", "CTCSS for the Heathkit HW-202", and Micoders I and II: Look Closely." Heathkit, which for many years was the largest manufacturer of ham radio and many other products in build-it-yourself kit form, closed shop a number of years ago.

Many of the ham radio items, including transmitters, receivers, transceivers, and tons of accessories, still are useful in today's world of Amateur Radio. Rob's journal will publish articles about using them, upgrading them, and occasionally a story or two reminiscing about the company and its products. It is a monthly publication.

Articles and photos may be mailed to Rob at 202 Midvale Drive, Marshall, WI 53559. Subscriptions are \$25.00 for one year (\$30.00 in Canada), and elsewhere the rate will depend on prevailing postage rates to the destination address. Subscribers get one free 25-word ad per month. Subscriptions should be with check or money order, or by Visa or Mastercard, at 800-372-4287. Information is available by email at [rehummel@aol.com](mailto:rehummel@aol.com)

He answers his email once or twice a week. Ad deadline for the journal is the 10th of each month.

BSSS editor

### Florida judge throws out case against ham

A County Court judge in Florida has dismissed a case against Joseph Osborn, KF4HXE, of Plantation, Florida, whose radio gear was confiscated by police under Florida's "scanner" law earlier this year. Osborn was involved in a minor accident on May 8, 1997, and subsequently cited by police in Davie, Florida, allegedly for breaking state law by having radios in his car capable of receiving police frequencies. Although the law specifically exempts hams, Davie Police impounded Osborn's equipment anyway because he could not produce his ham ticket -- lost during a recent move. Even after Osborn showed Davie Police a copy of his license, authorities refused to drop the charges or to return his radios. Osborn later learned that police might have tampered with his equipment, possibly damaging it and voiding warranties.

Alexander L. Kaplan, KF4QBU, of Boca Raton -- an ARRL Volunteer Counsel -- represented Osborn. John Hennessee, N1KB, of the ARRL Regulatory Information Branch, supplied information on federal pre-emption.

Broward County Court Judge J. Steven Shutter ordered the case dismissed late last month. Shutter said the state law does not require hams to have their licenses in their possession, as local police had asserted. The judge also cited federal pre-emption of prosecution of hams under state and local laws that make it illegal to possess scanning radios capable of receiving public safety or emergency frequencies. Florida's law bans such scanners in vehicles and in retail stores, but not in homes.

Shutter ordered Davie police to return Osborn's radio equipment within ten days of his ruling and to provide an affidavit specifying "who, what, when, where and how the radios were examined and what was done to them." Osborn has since recovered his radios from the Davie Police but not the required affidavit. Kaplan said this week that he's considering filing a contempt order. He also says he's begun civil proceedings against the Town of Davie. Meanwhile, an independent repair shop is evaluating Osborn's equipment to see if it was damaged.

*The ARRL Letter*, 10/03/97

## ATV EMAIL ADDRESS CORRECTION

We received some mail telling us that the email address for the reflector for the new Baraboo ATV repeater bounced. Yup. And we found out why. The address we printed was wrong. Somewhere along the way, an "e" rolled off the copy desk, and is probably laying under the desk even now. But since we have a lot of surplus "e"s, we will use one (they are not rationed this week) to give you the correct email address. Here it is:

[user\\_mgr@shopstop.net](mailto:user_mgr@shopstop.net)

Thanks Jim Paul/N9LKY

### ARRL audio news debuted October 17

The League inaugurated ARRL Audio News, a weekly, Web-based audio news service, on October 17. Compiled from *The ARRL Letter*, ARRL Audio News includes the week's top news from the world of Amateur Radio and the League. ARRL Audio News is available in RealAudio format via the ARRLWeb, <http://www.arrl.org/>. Tucson Amateur Packet Radio -- TAPR -- has generously agreed to provide space on its Web server to permit the League to offer this service.

Senior Assistant Technical Editor Rick Lindquist, N1RL, who compiles and edits *The ARRL Letter* is the regular on-air voice for ARRL Audio News. The service will be available free to anyone and may be retransmitted in whole or in part for bulletin purposes provided ARRL Audio News is credited as the source.

Each edition of ARRL Audio News will contain up to 10 minutes of timely Amateur Radio news. It will be available via the ARRLWeb every Friday by 9 PM Eastern Time. Dial-up telephone access to ARRL Audio News will be announced later.

For more information, contact Rick Lindquist, N1RL, e-mail [n1rl@arrl.org](mailto:n1rl@arrl.org); tel 860-594-0222.

*The ARRL Letter*, 10/10/97

### New Technical Specialist

Congratulations to Dennis Doonan, W9DAD of Racine, who has been recently appointed to the group of ARRL Technical Specialists in Wisconsin. Dennis, an ARRL Life member and Volunteer Examiner, is willing to help answer the technical questions of other Wisconsin Radio Amateurs as part of the ARRL Technical program.

You may have read some of Dennis' product and book reviews or hardware projects articles in *Byte*, *73* and *Micro Computing*. Dennis has considerable experience with analog and digital circuits and industrial power conversion equipment, including practical operation and design applications. W9DAD, currently Senior Electronics Technician for Eaton's Research Center in Milwaukee, was previously Principal Technician in Eaton's Kenosha Industrial Drive Development Division.

If you're pondering over something technical, just send your question to Dennis at 3536 Clairmont Street, Racine, WI 53406, who will be glad to try to help you to find an answer. Thanks, Dennis.

Richard Regent, K9GDF

### Sputnik model launch now set for early November

The latest information about the launch of that working model Sputnik 1 from the Russian Mir space station is that it will take place in early November. According to information received October 17 from Sergei Sambourov, chief of the cosmonaut Amateur Radio department for Russia's Energia space agency, the Sputnik 1 model will be launched November 3 during a spacewalk, although he cautioned that schedule could change. Two identical copies of the model Sputnik, assembled by students in Russia and equipped with a 2-meter transmitter by students in France, now are aboard Mir. They were carried to the space station earlier this month by a Progress supply rocket. Program sponsors initially intended to have the working Sputnik model launched from Mir on October 4, the 40th anniversary of the original Sputnik 1 satellite.

### Circus City Swapfest

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(808) 356-2313/356-4777

Bill Klinkner, N9KXX  
(808) 643-6908/643-6453  
<http://www.thelox.com/~ssschulze/hamfest.htm>

One of the working models of the Sputnik-40, as it's called, is to be hand-released by the Mir crew during the space walk. Latest information indicates the mini-satellite will transmit a "beep-beep" signal on or about 145.82 MHz (FM) from its 200-mW onboard transmitter. The batteries are expected to last a month or two. A QSL card will be available for those who receive the signal.

Guy Pignolet, secretary of the Aero-Club of France and an engineer with the French Space Agency said the project still needs financial support. "We have a lot of unpaid bills (we had to go ahead), and we still need about nine sponsors at \$6000 each," Pignolet said. He says the program would very much like to have US companies or even individuals "share the adventure together with the Russian and the French sponsors." A Brazilian company, TECSAT, this week signed on to sponsor the Sputnik 40 Years school satellite program.

For more information, contact Pignolet at 2 place Maurice Quentin, 75039 Paris Cedex 01, France; e-mail [pignolet@francenet.fr](mailto:pignolet@francenet.fr). For additional details and photos see <http://www.oceanes.fr/~fr5fc/spoutnik.html>.

*The Arri IETTER*, 10/24/97

### 4U1WRC to mark WRC-97

The International Amateur Radio Club in Geneva will operate 4U1ITU under the call sign 4U1WRC to mark the Radiocommunication Assembly (RA-97) and the World Radiocommunication Conference (WRC-97) that get underway there later this month. A commemorative QSL card will be available for contacts between October 20 and November 21, 1997.

4U1WRC will be operational in all modes, including PACTOR and CLOVER.

4U1ITU is maintained by the IARC for the use and benefit of club members and by other licensed radio amateurs. It's intended "to serve as a model of amateur radio operation at its highest standard." The station is located at ITU headquarters. QSL to IARC, Box 6, CH-1211 Geneva 20, Switzerland.

For more information, see <http://www.itu.int/radioclub>.

--Philippe Capitaine, HB9RKG/IARC

*The ARRL Letter*, 10/24/97

### KB7LPW gives up ham show for ping pong

Len Winkler, KB7LPW, says he's giving up his weekly Ham Radio & More radio program to concentrate on his new table tennis club in Phoenix, appropriately called Table Tennis & More. "October 26 will be the final live Show for Ham Radio & More," Winkler announced recently, citing "the lack of financial sponsors" for his decision. "I wish the best to Amateur Radio and will continue to enjoy using the bands and the excitement it creates."

Winkler, who has sounded the death knell for HR&M before, is sticking to his October 26 sign-off date "unless a minor miracle occurs by then, which I am not pursuing." The Ham Radio & More Show was on the air for nearly seven years. For much of that time, the program was syndicated by KFNN--a Phoenix AM station--to local broadcast outlets. More recently, it has been available only via shortwave broadcaster WWCR and via RealAudio on the Internet.

Winkler says table tennis has always been one of his passions and he recently opened up his public club and pro shop in Phoenix. "It will take time to build, but I really enjoy playing and coaching," he said.

For more information, see <http://www.goodnet.com/~lenwink/ttm.htm>.

*The ARRL Letter*, 10/24/97

### Say what? How's that again?

A couple were driving through Louisiana. As they approached Natchitoches, they were discussing the pronunciation of the town's name. When they stopped for lunch, the wife asked the manager, "Before we order, could you please pronounce for us where we are ... very slowly?" The manager leaned over the counter and said, "Burrtrrrr Gerrrrrr Kiiiiing."

- Credit wisely declined by sender

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# FCC issues new form 610 - old versions obsolete

The FCC announced this week that as of January 1, 1998, Amateur Radio applicants may only submit FCC Forms 610, 610 A and 610B that carry an edition date of September 1997. After the first of the new year, previous editions of Form 610 will not be accepted for filing by the FCC or by Volunteer Examiner Coordinators (VECs). Amateurs may begin using the new Form 610s now.

The major change on the new form is a certification that says the applicant has "read and will comply with Section 97.13(c) of the Commission's Rules" regarding RF radiation safety and the amateur service section of OST/OET Bulletin No 65, Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields. But, Amateur Radio Supplement B of Bulletin 65, which has additional information on how to conduct a routine RF safety evaluation and explains other aspects of RF safety, is still in the draft stages and not yet available to the ham radio community.

ARRL Executive Vice President David Sumner, K1ZZ, says the League is concerned that that the new Form 610 could be in the hands of hams before Amateur Radio Supplement B is complete. Sumner says it's essential that the FCC make Supplement B available in time for hams to complete their evaluations to meet the deadlines in the rules.

ARRL Lab Supervisor Ed Hare, W1RFI, who's been involved in reviewing the draft supplement, said he expects the FCC to release it sometime in November. The ARRL will release a book on the new RF safety regulations near the end of the year. "Above all, it is important that the required station evaluation be as easy as possible for hams," Hare said. "The FCC has pretty much met that goal. Additionally, most hams, by virtue of their power levels, will not need to do an evaluation at all."

Section 97.13(c) reads: Before causing or allowing an amateur station to transmit from any place where the operation of the station could cause human exposure to RF electromagnetic field levels in excess of those allowed under 1.1310 of this chapter, the licensee is

required to take certain actions.

1. The licensee must perform the routine RF environmental evaluation prescribed by 1.1307(b) of this chapter, if the transmitter PEP exceeds the following limits: 160-40 meters, 500 W; 30 meters, 425 W (legal limit is 200 W--Ed); 20 meters, 225 W; 17 meters, 125 W; 15 meters, 100 W; 12 meters, 75 W; 10 meters, 50 W; VHF (all bands), 50 W; 70 cm, 70 W; 33 cm 150 W; 23 cm, 200 W, 13 cm 250 W, SHF/EHF (all bands) 250 W.

2. If the routine environmental evaluation indicates that the RF electromagnetic fields could exceed the limits contained in 1.1310 of this chapter in accessible areas, the licensee must take action to prevent human exposure to such RF electromagnetic fields. Further information on evaluating compliance with these limits can be found in the FCC's OET Bulletin 65, Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.

The new Forms 610 may be obtained from the FCC's Web site via the Internet at <http://www.fcc.gov/formpage.html>, at <ftp://ftp.fcc.gov/pub/Forms/> or by fax at 202-418-0177 (request index, or for Form 610 use form code 000610, for Form 610A use form code 006101, for Form 610B use form code 006102). The FCC Forms Distribution Center will accept FCC forms orders by calling 800-418-3676.

ARRL VEs and VE teams will be able to obtain a supply of the new Forms 610 in mid to late November -- once the ARRL/VEC has had time to obtain a supply of the new forms.

Individual amateurs may obtain a copy of the new Form 610 by sending a self-addressed, stamped envelope (SASE) to: ARRL/VEC, 225 Main St, Newington CT 06111. Include 32 cents postage for each Form 610 requested (this is a four page form).

For general information, contact the FCC, 1270 Fairfield Rd, Gettysburg, PA 17325-7245, or call the FCC's National Call Center at 888-225-5322 (CALL FCC).--FCC

*The ARRL Letter, 10/24/97*

## ARRL announces 75th anniversary edition of the Handbook

The 1998 edition of *The ARRL Handbook for Radio Amateurs* is out and at a new, lower price. This marks the 75th edition of this standard electronics reference book, which will sell for \$32. Over 6 million copies have been sold since it was first published in the 1920s. Radio amateurs, electronic experimenters, engineers and technicians all have reserved a prominent place on their bookshelves for this essential electronics reference.

And the *Handbook* will continue to be available for years to come. Contrary to information circulated in Great Britain and elsewhere, the ARRL plans to continue the printed edition of the *ARRL Handbook for Radio Amateurs*. A report in the November issue of *Practical Wireless*, a British magazine, erroneously stated that the League planned to discontinue the printed *Handbook* in favor of the CD-ROM edition. "The paper *Handbook* remains our flagship technical publication, and we do not see that changing any time soon," ARRL Publications Manager and *QST* Editor Mark Wilson, K1RO, emphasized in a letter to Rob Mannion, G3XFD, the editor of *Practical Wireless*.

The 1998 *Handbook* provides 1200 pages of radio communication and electronics information--both theoretical and practical. A wide variety of construction projects and examples illustrate basic and advanced theory, from dc to microwaves. Schematics and photos help clarify principles, and several hundred tables provide valuable reference data. The use of a PC for both design and hardware control is integrated into many of the topics covered.

New projects in this edition include a high power, high efficiency antenna tuner, a new superregenerative VHF receiver that automatically receives several different types of modulation, and an integrated L-band antenna and amplifier for satellite use.

The book's 30 chapters cover ac/dc theory and components, analog and digital signal theory, test equipment and techniques, and other topics. Later chapters are devoted to power supplies, modulation, transmitting and receiving equipment, antennas, propagation and station setup. Chapters on components, construction, safety and electromagnetic interference cover the hobby's practical aspects.

To help make the book reader-friendly, each chapter has a printed thumb tab and a mini-table of contents opposite the first page of most chapters. Instead of bundling software with the handbook, all programs associated with some projects will be available free of additional charge from the ARRLWeb and the Hiram Bulletin Board (860-594-0306). All the software runs under Windows, and most works under DOS as well.

The *ARRL Handbook for Radio Amateurs* is item number 1786. It's available from Amateur Radio dealers or ARRL Publication Sales, 225 Main St, Newington CT 06111-1494; tel (toll-free) 888-277-5289 or FAX 860-594-0303. You can also order publications via the

Internet at <http://www.arrl.org/>. When ordering from ARRL, include \$6 for UPS shipping.

*The ARRL Letter, 10/17/97*

## Milwaukee Radio Amateur's Club celebrates 80 years

The Milwaukee Radio Amateur's Club, one of, if not the oldest Amateur Radio Clubs in the United States, will celebrate 80 years of continuous activity on December 14 with a Christmas party at Alioto's Restaurant, 3041 N. Mayfair. Hospitality hour is at 6 p.m., with dinner at 6:30 p.m.

The dinner will be Alioto's special buffet, which includes roast beef au jus, baked chicken, baked cod almonidine, and numerous other items. Drinks are not furnished, but are available, of course. Entertaining will be Dot Haslick and Dick Schlatterer.

Reservations for the party and celebration are due absolutely no later than November 30. The per-person cost is \$15.95, and checks should be payable to MRAC. All dinner ticket requests go to Club Treasurer Ken Eggert, W9MOT, 2815 Santa Barbara Drive, Brookfield, WI 53005-3711.

Congratulations to MRAC on its 80th from the BSSS staff. And, we should mention, tongue-in-cheek, that we strongly doubt that famed Milwaukee Mayor John Norquist will join the observance.

*MRAC HamateurChatter*

## Winnebago County ARES to meet

The Winnebago County ARES group has announced a meeting to be held November 12 at 5:30 p.m. at the Hooper Building at 201 Ceape Street, Oshkosh. ARES Section Emergency Coordinator John Leekley, WB9SMM, Milwaukee, Wayne Pennings, East Central District EC, and Kathryn Nichols, Director of the Red Cross will be there.

This is the second meeting in the reorganization process.

Questions may be directed to N9HUM, (920) 235-2185, or [fan46@execpc.com](mailto:fan46@execpc.com). All are welcome.

*Ann Frisch/N9HUM*



## World Radiocommunication Conference 97 to open in Geneva

Four items of prime interest to Amateur Radio will be on the agenda when the World Radiocommunication Conference 97 (WRC-97) opens October 27 in Geneva, Switzerland. ARRL Technical Relations Manager Paul Rinaldo, W4RI, is a member of the US delegation to the conference. Others attending include IARU representatives Larry Price, W4RA, Wojciech Nietyksza, SP5FM, and Michael Owen, VK3KI. Representing Canadian amateurs on his nation's delegation will be Jim Dean, VE3IQ, of Radio Amateurs of Canada (RAC).

WRC-97 delegates will discuss the so-called "Little LEO" issue during the monthlong session. While the Little LEO industry's preliminary proposals to share 2 meters, 1-1/4 meters and 70 cm generated quite a stir in the amateur community last year, current US proposals do not include any plans for sharing of amateur frequencies. Also of interest to hams is the specter of increased interference on some amateur UHF allocations from Earth Exploration Satellites (EES), used for mapping by synthetic aperture radars (SARs) that are expected to be mostly active in the Southern hemisphere. Amateur radio delegates will make known the needs of our service. WRC-97 will be asked to consider allocating the band 430-440 MHz to EES and upgrading the status of EES at 1240-1300 MHz.

Wind profiler radar systems operating near 50, 449 and 1000 MHz also bear watching because of the potential for interference to Amateur Radio. These systems are used by weather forecasters to look at wind patterns in the higher atmosphere.

WRC-97 delegates also will set the agenda for WRC-99, where the potential exists to establish a worldwide 40-meter allocation. The current US concept calls for a "harmonized" band at 6900 to 7200 kHz that would be available to hams around the globe. This would mean hams would shift down by 100 kHz while broadcasters moved 100 kHz up the band. Yet to be determined is how fixed services would be handled in the realignment. The IARU is committed to the goal of a 300-kHz worldwide exclusive allocation for 40 meters. Right now, only 7000 to 7100 kHz is available in Regions 1 and 3, where broadcasters dominate the upper 200 kHz of the band.

WRC-97 is scheduled to conclude November 21.

*The ARRL Letter, 10/17/97*

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NOVEMBER 1997



# WISCONSIN REPEATERS

Listed in order by frequency

Provided by the Wisconsin of Repeaters

The WISCONSIN ASSOCIATION OF REPEATERS is an organization of trustees and representatives of repeaters, state-wide, whose goal is mutual cooperation on the VHF UHF spectrum, in the voluntary spirit of Amateur Radio.

## GENERAL FREQUENCY COORDINATION POLICIES

1. We attempt to place no two repeaters on the same pair closer than 90 miles on Two Meters, 70 miles on 222 MHz, and 60 miles on 440 MHz. and up.
2. We attempt to place no repeater on a 15 kHz split pair closer than 40 miles to any adjacent 30 kHz standard spacing machine.
3. We not only assist proposed repeaters in finding a frequency where possible, but we actively attempt to protect coordinated repeaters' frequencies from interference whenever possible.
4. W.A.R. has suggested band plans for most of the FM spectrum, a subaudible tone plan for the State of Wisconsin and all necessary information for coordination of new or modifications to existing repeaters. Contact the Frequency Coordinator.

Dan Bolander, WB9TYT  
Wisconsin Association of Repeaters  
6925 W. Sheridan Ave.  
Milwaukee, WI 53218

O	Carrier Access	PL	Sub-Audible Continuous Tone
T	Touchtone	C	Closed Private Repeater
A	Autopatch	(CA)	Closed Private Autopatch
E	Emergency Power	L	Link and/or Crossband
P	Portable	R	RACES Affiliated
Z	Autopatch to Law Enforcement	X	Wide Area Coverage

## Wisconsin Sub-Audible Tone Plan By Region

North Central - 2A, 114.8 HZ.	North East - 1B, 107.2 HZ.
North West - 2Z, 110.9 HZ.	South Central - 3Z, 123.0 HZ.
South East - 3A, 127.3 HZ.	South West - 3B, 131.8 HZ.

## Standard Inputs Unless Otherwise Noted

-1.700 MHz. for 6 Meters  
-600 KHz. below 147.00 MHz, +600 KHz. TO 148.00 MHz. for 2 Meters  
-1.6 MHz. for 220 MHz, and + 5 MHz. for 440 MHz.  
421.25 MHz. TV Video + 18 MHz. 425.75 MHz. TV Aural, + 9 MHz.

Location	Rg	Output	Call	Access	Update	OK	Sponsor	Updated
MILWAUKEE	SE	29.680	N9BBG/R	O PL127.3		*	W.E.R.A.	10/10/97
HOLCOMBE	NW	52.810	N9LIE/R	O PL110.9 E X		*	N9LIE	05/07/97
MILWAUKEE	SE	52.830	WN9HGB/R	O PL173.8		*	WN9HGB	07/08/97
WAUSAU	NC	52.830	N9MEA/R	O PL114.8 E		*	N9MEA	03/20/97
HILBERT	NE	53.170	KN9P/R	O		*	KA90JN	04/06/97
WAUSAU	NC	52.890	W9SM/R	O PL114.8		*	W9SM	03/20/97
ASHLAND	NW	52.950	KB9AMY/R	O CA E L X Z R		*	KB9AMY	05/09/97
MEQUON	SE	53.010	N9PMR/R	O PL103.5		*	N9PMR	03/20/97
MILWAUKEE	SE	53.030	WB9TRO/R	O PL103.5 E L		*	WERA	02/19/97
ANTIGO	NC	53.050	N9QMP/R	O		*	N9QMP	09/23/97
MADISON	SC	53.070	N9KAN/R	O PL103.5 CA ELZRA		*	S.W.R.G.	03/29/96
FORT ATKINSON	SC	53.090	AA9AD/R	O PL103.5 LXWX RA		*	S.W.R.G.	03/29/96
METEOR HILL	NW	53.150	N9QWH/R	O USE -1 MHZ NOW		*	N9QWH	08/20/97
JANESVILLE	SC	53.190	KF9RU/R	O PL123.0 E		*	KF9RU	05/20/97
WAUSAU	NC	53.450	W9BCC/R	O PL103.5		*	R.M.R.A.	05/14/97
WABENO	NE	145.110	KF9DB/R	O PL107.2 E L147.2		*	N.E.W.R.L	05/09/97
MONROE	SC	145.110	N9W/R	O PL114.8		*	G C ARA	04/07/97
RICE LAKE	NW	145.110	N9QWH/R	O PL110.9 AELXZWR		*	N9QWH	08/20/97
HUDSON	NW	145.130	W9AVX/R	O CA R E		*	SCC RACES	02/08/97
MILWAUKEE	SE	145.130	N9LKH/R	O PL127.3 A E L Z		*	MAARS	07/09/97
SAYNER	NC	145.130	KB9CBL/R	O E L145.210		*	NWARC	06/19/97
APPLETON	NE	145.150	WD9FLJ/R	O PL107.2 CA EZAR		*	O CO REDX	01/12/97
HALES CORNERS	SE	145.170	W9FK/R	O A Z		*	WARAC	12/01/96
WEYERHAUSER	NW	145.170	KADPZ/R	O E		*	MAGIC	06/10/96
MANITOWOC	NE	145.190	WB9MFB/R	O PL107.2 E RA		*	WB9MFB	05/09/97
SPOONER/HERTE	NW	145.190	KB9OHN/R	C CA E Z L		*	BARS	04/06/97
BERLIN	SC	145.210	N9PAA/R	O PL123.0 X		*	N9PAA	05/09/97
RHINELANDER	NC	145.210	KA9BHL/R	O CA E		*	NWARC	06/19/97
MILWAUKEE	SE	145.230	N9BMH/R	O PL127.3 TT		*	N9BMH	05/30/97
MILWAUKEE	SE	145.250	KA9WXR/R	O PL127.3 DS		*	UW-M ARC	10/15/96
LOHRVILLE	SC	145.270	KB9JJB/R	O PL123.0		*	KB9JJB	08/11/97
NEW RICHMOND	NW	145.270	N9LIE/R	O PL110.9 L X		*	N9LIE	05/07/97
PLATTEVILLE	SW	145.270	KA9WBX/R	O A E		*	UWP ARC	06/17/96
ADAMS	NC	145.290	KB9JYT/R	O CA E Z WX TT		*	ACARC	08/20/97
ANTIGO	NC	145.310	KD9HH/R	O A E Z		*	KD9HH	04/06/97
BARABOO	SC	145.310	N9KXX/R	O PL123.0		*	N9KXX	07/11/97
SUPERIOR	NW	145.310	N9QWH/R	O PL110.9 EZ		*	N9QWH	09/14/97
APPLETON	NE	145.330	WD9FLJ/R	O PL107.2 RA		*	F V VHF A	05/30/97
OSSEO	NC	145.330	N9LIE/R	O PL110.9 L X		*	N9LIE	05/07/97
ASHLAND	NW	145.350	KB9AMY/R	O CA E L X Z R		*	KB9AMY	05/09/97
PEPIN	NW	145.350	KB9S/R	O		*	WAB ARS	10/08/97
SHAWANO	NC	145.350	KA9NWY/R	O PL114.8 CA EXZAR		*	KA9NWY	03/01/96
EAGLE RIVER	NC	145.390	KD9PT/R	O CA DS E Z		*	KD9PT	05/09/97
MILWAUKEE	SE	145.390	WB0AFB/R	O PL127.3 DS		*	MATC RC	06/10/96
TOMAH	SW	145.390	N9BOE/R	O PL131.8 CA EXZRA		*	N9BOE	05/09/97
FOND DU LAC	NE	145.430	K9IA/R	O PL107.2		*	FdL ARA	04/06/97
TOMAHAWK	NC	145.430	N9CLE/R	O A E Z911 X		*	TOM RP A	08/20/97
JANESVILLE	SC	145.450	WD9ACY/R	O		*	R.A.T.S.	05/09/97
CRIVITZ	NE	145.470	KF9GQ/R	O PL107.2 TT		*	ATHELSTAN	04/06/97
HOLCOMBE	NW	145.470	N9LIE/R	O PL110.9 E L X		*	N9LIE	05/07/97
FORT ATKINSON	SC	145.490	WB9EMR/R	O A TT E L A WX Z		*	TCARC	05/01/96
GREENWOOD	NC	145.490	W9FPE/R	O E		*	W9FPE	05/09/97
SOLO SPRINGS	NW	145.490	K9ASC/R	O A E Z		*	DC RACES	03/11/97
BAYFIELD	NW	146.610	W9BCY/R	O CA		*	NLAND ARC	05/30/96
MANITOWOC	NE	146.610	W9DK/R	O PL107.2CA EZRAWX		*	MANCORAD	04/07/97
MENOMONIE	NW	146.610	WB9YMB/R	O A E L X Z A		*	R CDR RA	04/07/97
BIG FLATS	SE	146.625	N9WYQ/R	O PL114.8 E		*	N9WYQ	05/20/97
JUNEAU	SC	146.640	WB9ADB/R	O PL123.0 AELXZAR		*	ROCK R RC	05/30/97
WAUSAU	NC	146.640	W9SM/R	O PL114.8 AELXZ911		*	W.V.R.A.	08/03/97
APPLETON	NE	146.655	KB9ENO/R	O PL107.2 AEDSLWXRA		*	ECP LTD	05/09/97
HOLLANDALE	SC	146.655	KB9AKM/R	O PL123.0		*	HVARC	04/07/97
BELOIT	SC	146.670	WA9JTX/R	O PL123.0 E R #77		*	BELOIT AR	04/07/97
LAC DU FLAMBE	NC	146.670	N9AFN/R	O PL107.2		*	N9AFN	05/09/97
MILWAUKEE	SE	146.670	W9WK/R	O PL127.3 AEXZRWX		*	ARES	01/01/96
STEVENS POINT	NC	146.670	W9QFW/R	O A E Z		*	CWRA LTD	04/06/97
BALDWIN	NW	146.685	WB0OND/R	O E L X R A		*	SARCASM	09/15/96
POUND	NC	146.685	KA9JVH/R	O PL107.2 DS L		*	KA9JVH	06/10/96
LAC DU FLAMBE	SW	146.700	WA9HCZ/R	O RTTY 2125MARK		*	WA9HCZ	04/07/97
MILTON	SC	146.700	W9BTN/R	O		*	W9BTN	04/07/97
RICE LAKE	NW	146.715	K9RIJ/R	O A TT E		*	K9RIJ	04/06/97
WAUSAU	NC	146.715	WB9PRI/R	O E		*	WB9PRI	12/01/96
CARLSVILLE	NE	146.730	KF9RU/R	O PL114.8		*	KF9RU	04/06/97
IRMA	NC	146.730	K9GTQ/R	O		*	DOOR CO	04/07/97
						*	K9GTQ	05/09/97

## From the Frequency Coordinator

Dan Bolander, WB9TYT

About six weeks ago, I sent out over sixty letters to repeater trustees, containing about 125 repeater listings that were two or more years old, and asking if they were still really there and wanted to continue having WAR protect their frequencies. I received a few "salty" letters, and a lot of nice, very informative letters and phone calls. But I am

still waiting on quite a few, and will be deleting them very soon if I do not get any response. That will shorten up the waiting list a bit.

If you are a repeater trustee, please, if you have not responded to the query, reply soon. Your cooperation is essential.

Thanks in advance.

73, Dan

SAINT LAWRENCE	SE	146.730	N9LZW/R	O PL127.3 X RA	*	W.C. ARC	04/06/97
BURLINGTON	SE	146.745	WB9CAS/R	O PL127.3 E	*	WB9CAS	05/14/97
NEW AUBURN	NW	146.745	N9LIK/R	O PL110.9 CA E	*	N9LIK	05/28/97
APPLETON	NE	146.760	K9OQO/R	O PL100.0 DS EX RA	*	F V VHF A	05/30/97
LA CROSSE	SW	146.760	K9CUT/R	O TT X	*	LaCrossRA	03/29/96
MADISON	SC	146.760	W9HSY/R	O PL123.0 CA DSEXZ	*	M A R A	04/07/97
SUPERIOR	NW	146.760	W9BWK/R	O	*	T P A RA	01/28/96
GRANTON	NC	146.775	N9RRF/R	O WX	*	N9RRF	05/09/97
MILWAUKEE	SE	146.790	W9HHX/R	O PL127.3 A CA DS	*	MSOE ARC	05/09/97
WISCONSIN RAP	NC	146.790	W9DQA/R	O PL114.8 CAEXZAR	*	MIDST ARC	01/01/96
KEWAUNEE	NE	146.805	WB9RJB/R	O PL107.2	*	WB9RJB	02/07/97
MENOMONIE	NW	146.805	N9HNI/R	O CA 911 #DOWN	*	N9HNI	03/09/97
DELAFIELD	SE	146.820	KE9QP/R	O PL127.3 CA EX Z	*	SEWFARS	09/15/96
SUPERIOR	NW	146.820	WA9VDW/R	O PL203.5 A DS	*	T P T G	01/28/96
WAUSAU	NC	146.820	W9BCC/R	O PL114.8 CA E X L	*	R.M.R.A.	05/14/97
ASHWAUBENON	NE	146.835	KB9DSV/R	O PL107.2	*	KB9DSV	05/09/97
BLUFF SIDING	SW	146.835	WB0BDI/R	O	*	WINON ARC	04/06/97
MAUSTON	NC	146.850	N9FVP/R	O E	*	ARC OF CW	05/22/96
MILWAUKEE	SE	146.850	W9KHO/R	O PL127.3	*	MICORS	03/07/97
ELKHORN	SE	146.865	KB9LBR/R	O	*	LAARC	04/07/97
SHAWANO	NC	146.865	KB9DAC/R	O PL114.8	*	KB9DAC	04/06/97
BARABOO	SC	146.880	WR9ABE/R	O PL123.0 DS E XWX	*	C.W.R.A.	10/08/97
HILBERT	NE	146.895	N9OBG/R	O PL146.2/151.4	*	N9OBG	01/22/96
EAU CLAIRE	NW	146.910	K9UXP/R	O PL110.9 A E X	*	E C ARC	04/06/97
MILWAUKEE	SE	146.910	K9IZV/R	O PL127.3 DSEXZAWX	*	MKE RPTR	09/13/97
WAUPACA	NC	146.925	N9BKJ/R	O CA E X A R Z	*	N9BKJ	06/18/96
HIXTON	SW	146.940	KC9YE/R	O X A	*	T-J RA	05/07/97
MADISON	SC	146.940	N9KAN/R	O PL123.0 DS A	*	C W R A	10/08/97
RHINELANDER	NC	146.940	W9ZZZ/R	O A E X Z WX AR	*	RHIN RP A	04/07/97
GREEN LAKE	SC	146.955	KB9WC/R	O	*	G FOX ARC	04/06/97
HUDSON	NW	146.955	K0LAY/R	O TTON787 TTOFF1787*	*	KOLAV	04/06/97
CEDARBURG	SE	146.970	W9CQO/R	O PL127.3 CA E X Z	*	O.R.C	05/07/97
IRMA	NC	146.970	KC9NW/R	O CA L	*	KC9NW	05/14/97
LA CROSSE	SW	146.970	K0JYB/R	O A E X Z WX RA	*	RVRLNDARC	04/06/97
STEVENS POINT	NC	146.985	W9NN/R	O A TT E Z AR	*	CURA LTD	04/06/97
MILWAUKEE	SE	147.000	W9PY/R	O PL146.2 A X	*	PHANTOM	03/06/97
PARK FALLS	NC	147.000	KA9EOK/R	O L HLCMB&HYWRD	*	PRICE CRA	08/20/97
MANITOWOC	NE	147.030	N9GHE/R	O PL110.9 A Z R	*	N9GHE	03/08/97
RICE LAKE	NW	147.030	WB9WFG/R	O PL110.9	*	WB9WFG	04/06/97
SHELL LAKE	NW	147.045	N9PHS/R	O E AR	*	NORWESCO	04/06/97
PLYMOUTH	NE	147.060	WE9R/R	O PL107.2 E DS	*	SHEB.CO	07/05/96
WAUSAU	NC	147.060	W9KRY/R	O PL71.9 CA E X	*	KC9NW	05/14/97
GREEN BAY	NE	147.075	N9PAY/R	O PL107.2	*	AHSTC	05/09/97
JANESVILLE	SC	147.075	KB9YC/R	O PL123.0	*	KB9YC	04/07/97
PRAIRIE FARM	NW	147.075	K9ST/R	O	*	K9ST	04/07/97
FOND DU LAC	NE	147.090	WD9ESH/R	O PL107.2	*	FDL RPT	03/07/97
LA CROSSE	SW	147.090	N9ETD/R	O	*	N9ETD	04/06/97
MILWAUKEE	SE	147.105	K9IFF/R	C CA E TT	*	K9IFF	04/06/97
GILLINGHAM	SC	147.120	K0DB/R	O	*	K0DB	03/24/97
GREEN BAY	NE	147.120	K9GB/R	O PL107.2 CADSEXZ	*	G B M&K	09/13/97
SPOONER	NW	147.135	KE6WF/R	O	*	KE6WF	04/07/97
TIGERTON	NC	147.135	KF9TS/R	O X WX	*	KF9TS	05/14/97
WEST MILWAUKEE	SE	147.135	NY9T/R	O PL141.3	*	NY9T	04/07/97
MADISON	SC	147.150	W9HSY/R	O PL123.0 CA DSEXZ	*	M A R A	04/14/97
MEDFORD	NC	147.150	KB9OBX/R	O A E WX	*	TAYLOR	04/06/97
MILWAUKEE	SE	147.165	WB9SDD/R	O PL127.3 E	*	WB9SDD	05/09/97
OGDENSBURG	NC	147.165	N9NOJ/R	O PL103.5 E DS	*	N9NOJ	04/06/97
MARSHFIELD	NC	147.180	AA9BN/R	O A E Z L444.975	*	MAARS	01/14/96
SISTER BAY	NE	147.180	W9AIQ/R	O PL107.2 CA E	*	DC ARC	09/11/97
APPLETON	NE	147.195	N9PAO/R	O PL107.2 L	*	N.X.C.	06/20/97
BALSAM LAKE	NW	147.195	N9QFW/R	O PL110.9	*	N9QFW	06/06/96
MILWAUKEE	SE	147.210	W9ODD/R	O PL127.3	*	M.U. RAMS	04/07/97
PEWAUKEE	SE	147.210	WB9AKC/R	O PL127.3 TT	*	WCTC ARC	05/30/97
STURGEON BAY	NE	147.210	W9AIQ/R	O CA A E X Z	*	DC ARC	09/11/97
BELDENVILLE	NW	147.225	WB0WY/R	O PL110.9 A E L	*	B.A.T.S.	06/10/96
LOOI	SC	147.225	K9EYY/R	O PL123.0	*	K9EYY	04/07/97
EAU CLAIRE	NW	147.240	WU9R/R	O PL110.9 A E	*	E C ARC	04/06/97
OSHKOSH	NE	147.240	KA9JAC/R	O CA E Z RA WX	*	WIN CTY E	05/10/97
HAYWARD	NW	147.255	W9NNS/R	O PL110.9 A E Z LX	*	NVNA	08/20/97
SHEBOYGAN	NE	147.255	N9REH/R	O PL127.3 CADSEL	*	N9REH	05/07/97
GREEN BAY	NE	147.270	KE9PW/R	O PL107.2	*	NEUWL	04/06/97
RACINE	SE	147.270	W9UDU/R	O CA E Z TT A	*	LAKESHORE	04/06/97
HARTFORD	SE	147.285	K9MLD/R	O PL127.3 E	*	K9MLD	05/14/97
NEW HOLSTEIN	NE	147.300	K9LGU/R	O A E Z	*	C.A.R.E.S	04/06/97
SPOONER/HERTE	NW	147.300	KB9OHN/R	O CA E Z L	*	BARS	04/06/97
BARABOO	SC	147.315	N9QIP/R	O PL100.0 E X WIN	*	N9QIP/WIN	05/07/97
PORT WASHINGT	SE	147.330	WB9RQR/R	O PL127.3 CA EXZWX	*	OZARES	04/06/97
ROBERTS	NW	147.330	KA9YRV/R	O PL110.9	*	SCVRA	04/07/97
WISCONSIN RAP	NC	147.330	K9PJB/R	O PL114.8 E	*	WI AIR RA	04/07/97
HOLCOMBE	NW	147.345	N9QWH/R	O PL136.5 L	*	N9QWH	08/20/97
OSHKOSH	NE	147.345	N9AOT/R	O PL107.2	*	SOLAR	02/08/97
GREEN BAY	SE	147.360	K9EAM/R	O A E WX A	*	G B M&K	09/13/97
MOUNT STERLIN	NW	147.360	W9DMH/R	O E X WX	*	W9DMH	04/06/97
RHINELANDER	NC	147.360	KA9TCC/R	O 114.8 A	*	KA9TCC	03/10/97
CHIPPEWA FALL	NW	147.375	W9HFT/R	O PL110.9 CA DS EX	*	W9HFT	04/06/97
OLON SPRINGS	NW	147.390	N9PHS/R	O	*	N9PHS	08/20/97
WAUKESHA	SE	147.390	N9KS/R	O PL141.3	*	EARS/KMRA	06/09/96
WAUPACA	NC	147.390	WA9FDC/R	O X A R WX	*	WP'ACA RC	05/09/97
TOMAHAWK	NC	223.760	N9CLE/R	O	*	TCM RP A	08/20/97
FRANKSVILLE	SE	223.800	KC9NG/R	O PL127.3	*	KC9NG	04/06/97
EAU CLAIRE	NW	223.820	N9RSU/R	O PL67.0 A	*	N9RSU	03/19/97
WEST BEND	SE	223.820	N9NBN/R	O PL114.8 CA	*	N9NBN	03/03/97
FOND DU LAC	NE	223.900	WA6COY/R	O PL107.2 CA EXWX	*	FDL RA	05/09/97

ASHWAUBENON	NE	223.940	KB9DSV/R	O	* KB9DSV	05/09/97	WAUSAU	NC	443.750	KC9NW/R	O	PL71.9 CA X L E	* KC9NW	05/14/97
BURLINGTON	SE	224.060	N9BBQ/R	O	* SEWERS	04/07/97	MILWAUKEE	SE	443.800	N9GMT/R	O	PL114.8 A EZ L X	* FM38	09/11/97
WALES	SE	224.120	WB9DRO/R	O	* WB9DRO	07/29/97	RIVER FALLS	NW	443.800	K9ZMA/R	O		* K9ZMA	05/30/97
GREEN BAY	NE	224.140	W9HAM/R	O	* RADACTV	04/06/97	BERLIN	SC	443.850	N9AOZ/R	O	PL123.0 A E X	* N9AOZ	04/08/97
MADISON	SC	224.160	WB9RSQ/R	O	* WB9RSQ	05/30/97	BALSAM LAKE	NW	443.900	N9QFW/R	O	PL110.9	* N9QFW	06/06/96
GERMANTOWN	SE	224.180	W9CQO/R	O	* O.R.C.	05/07/97	BARABOO	SC	443.900	N9QIP/R	O	PL100.0 E X L	* W.I.N.	05/07/97
BELOIT	SC	224.300	N9BUL/R	O	* C.B.S. RG	04/07/97	POWERS LAKE	SE	443.925	K9XN/R	O	PL114.8 X	* LAKARS	04/06/97
FORT ATKINSON	SC	224.420	N9DIT/R	O	* FT AT RG	05/01/96	CUDAHY	SE	443.950	AA9JR/R	O	PL127.3	* AA9JR	03/07/97
SHAWANO	NC	224.480	KG9AL/R	O	* KG9AL	04/06/97	WAUSAU	NC	443.950	KC9NW/R	O	E	* KC9NW	05/14/97
SPOONER/HERTE	NW	224.500	KB9OHN/R	O	* BARS	04/06/97	MANITOWOC	NE	443.975	N9GHE/R	O	A R	* N9GHE	03/08/97
WINNECONNE	NE	224.500	KB9IE/R	O	* P.G.R.A.	03/19/96	FITCHBURG	SC	444.000	KA9VU/R	O	PL114.8 L X WX	* BURG	05/09/97
WEST ALLIS	SE	224.520	KA9JCP/R	O	* KA9JCP	04/07/97	STURGEON BAY	NE	444.000	WB9YUY/R	O		* WB9YUY	04/07/97
MANITOWOC	NE	224.540	N9GHE/R	O	* N9GHE	03/08/97	RACINE	SE	444.050	KA9LOK/R	O		* KA9LOK	02/08/97
WAUSAU	NC	224.640	W9SM/R	O	* W.V.R.A.	05/30/97	PLYMOUTH	NE	444.100	KD9TZ/R	O	PL107.2	* S CTY 440	04/07/97
BARABOO	SC	224.660	KE9KX/R	O	* KE9KX	01/23/96	WAUSAU	NC	444.100	W9SM/R	O	PL114.8 AELXZ911	* W.V.R.A.	05/30/97
KENOSHA	SE	224.800	K9RI/R	O	* K.A.R.S.	04/07/97	DELAFIELD	SE	444.125	KE9QP/R	O	PL114.8 DS E X	* SEWFARS	09/15/96
BELDENVILLE	NW	224.840	WB9WOT/R	O	* B.A.T.S.	06/10/96	NECEDAH	SE	444.125	K9UJH/R	O	PL123.0	* K9UJH	08/20/97
BALSAM LAKE	NW	224.900	N9QFW/R	O	* N9QFW	06/06/96	FOND DU LAC	NE	444.150	WA4COY/R	O	PL107.2 WX	* WA4COY	05/09/97
CUDAHY	SE	224.900	NK9G/R	O	* NK9G	06/10/96	CLEVELAND	NE	444.175	KF9SJ/R	O	PL107.2 CA ELWA	* KF9SJ	06/09/97
MILWAUKEE	SE	224.960	WD9EUF/R	O	* WD9EUF	04/29/97	MILWAUKEE	SE	444.200	K9HXA/A	C	PL114.8 CA L	* K9HXA	06/02/97
WAUSAU	NC	421.250	K9PT/R	O	* RMATS	06/04/97	OSSEO	NC	444.200	N9LIE/R	O	PL110.9 L X	* N9LIE	03/29/96
HALES CORNERS	SE	427.250	N9BMH/R	O	* N9BMH	08/20/97	MILWAUKEE	SE	444.300	W9WK/R	O	PL114.8 L Z AR	* ARES	01/01/96
WAUSAU	NC	920.000	K9PT/R	O	* RMATS	06/04/97	WAUSAU	NC	444.300	W9BCC/R	O	PL114.8 CA E X	* R.M.R.A.	05/14/97
KENOSHA	SE	442.000	W9UJ/R	O	* LAKESHORE	10/08/97	MILWAUKEE	SE	444.325	N9CFG/R	O	PL114.8	* B.I.O.S.	04/07/97
SHAWANO	NC	442.050	KB9DAC/R	O	* KB9DAC	05/20/97	COLFAX	NW	444.350	N9ISN/R	O		* N9ISN	06/09/97
CEDARBURG	SE	442.100	KA9QLP/R	O	* CFD/WERA	04/07/97	PLYMOUTH	NE	444.350	WE9R/R	O	PL114.8 E DS L X	* WERA	07/05/96
PLAIN	SC	442.100	KA9VU/R	O	* BURG	05/09/97	EAGLE RIVER	NC	444.400	KA9UCE/R	O	PL114.8 AEXZ AR	* E.S.R.G.	01/01/96
APPLETON	NE	442.125	W9RIC/R	O	* WX9C	04/06/97	GREEN LAKE	SC	444.400	KB9W/R	O	E X A WX	* G FOX ARC	04/06/97
BURLINGTON	SE	442.125	N9RNC/R	O	* N9RNA	05/25/97	MENOMONEE FAL	SE	444.425	KA9FIN/R	O		* SHRINE	03/18/96
SHELL LAKE	NW	442.150	N9PHS/R	O	* NORWESCO	08/15/97	KAUKAUNA	NE	444.450	ND9Z/R	O	PL107.2 CA TT	* ND9Z	05/09/97
KENOSHA	SE	442.200	N9OIG/R	O	* N9OIG	05/20/97	MILWAUKEE	SE	444.450	KA9QMD/R	O	PL114.8 A	* KA9QMD	03/10/97
WAUSAU	NC	442.200	N9QIP/R	O	* N9QIP	05/20/97	ONALASKA	SW	444.475	W9LZQ/R	O		* RARC	03/04/97
UNION GROVE	SE	442.250	N9OIG/R	O	* N9OIG	04/06/97	MADISON	SC	444.500	WB9TAE/R	O	PL123.0 CA DS EL	* WB9TAE	06/10/96
CHIPPEWA FALL	NW	442.300	WD9HFT/R	O	* WD9HFT	04/06/97	GERMANTOWN	SE	444.525	WD9IEV/R	O	PL114.8	* WD9IEV	04/06/97
FORT ATKINSON	SC	442.300	N9QIP/R	C	* W.I.N.	05/07/97	HOLCOMBE	NW	444.525	N9LIE/R	O	PL110.9 E L X	* N9LIE	05/07/97
ALLENTON	SE	442.350	N9GMT/R	O	* FM38	09/11/97	HOLLANDALE	SC	444.550	N9QIP/R	C	PL100.0 E X L	* N9QIP/WIN	05/07/97
ASHLAND	NW	442.350	KB9AMY/R	O	* KB9AMY	05/09/97	TOMAHAWK	NC	444.575	N9CLE/R	O		* N9CLE	08/20/97
LA VALLE	SC	442.400	W9EBF/R	O	* W9EBF	04/06/97	LA CROSSE	SW	444.600	WA9HCZ/R	O		* ONA ARC	04/07/97
NEW BERLIN	SE	442.400	W9EBF/R	O	* W9EBF	04/06/97	SHEBOYGAN	NE	444.600	N9REH/R	O	PL114.8 DS E	* N9REH	05/09/97
CALEDONIA	SE	442.500	WA9KVE/R	O	* WA9KVE	03/18/96	OLON SPRINGS	NW	444.625	N9QWH/R	O	PL110.9	* N9QWH	10/04/95
GALESVILLE	SW	442.500	N9QIP/R	O	* N9QIP	08/15/97	IOLA	NC	444.650	N9NOI/R	O	PL114.8	* N9NOI	04/07/97
TREVOR	SE	442.600	KA9VZD/R	O	* KA9VZD	04/07/97	NEW RICHMOND	NW	444.675	N9LIE/R	O	PL110.9 L X	* N9LIE	03/29/96
MILWAUKEE	SE	442.650	N9VHK/R	O	* N9VHK	04/07/97	STEVENS POINT	NC	444.700	KC9NW/R	O	E CA L	* KC9NW	05/14/97
FORT ATKINSON	SC	442.750	N9DIT/R	O	* FT AT RG	08/01/96	PARK FALLS	NC	444.750	KA9EOK/R	O		* PRICE CRA	08/20/97
SHEBOYGAN	NE	442.900	AC9A/R	O	* AC9A	10/08/97	GREEN BAY	NE	444.775	K9EAM/R	O	CA E Z X	* G B M&K	09/13/97
BARABOO	SC	442.950	KE9KX/R	O	* DRAKE R.C	01/23/96	MADISON	SC	444.775	NG9V/R	O	PL114.8 DS WX DX	* NG9V	10/08/97
MILWAUKEE	SE	443.050	N9OSK/R	O	* N9OSK	07/10/97	MILWAUKEE	SE	444.800	K9HXA/A	C		* K9HXA	06/02/97
PEWAUKEE	SE	443.125	WB9AKC/R	O	* WCTC ARC	05/30/97	SPOONER	NW	444.800	KE6WF/R	O		* KE6WF	04/07/97
MILWAUKEE	SE	443.150	W9KHO/R	O	* MICORS	03/06/97	TOMAH	SC	444.800	N9QIP/R	C	PL100.0 E X L	* W.I.N.	05/07/97
MILTON	SC	443.175	K9RIJ/R	O	* K9RIJ	04/06/97	SAINT FRANCIS	SE	444.825	WJ9Z/R	O	PL127.3 A TT Z	* WJ9Z	04/06/97
BELDENVILLE	NW	443.225	WB9WOT/R	O	* B.A.T.S.	06/10/96	HAYWARD	NW	444.850	N9EGE/R	O		* N9EGE	04/06/97
SLINGER	SE	443.225	WD9DHI/R	O	* WERA	02/19/97	MILWAUKEE	SE	444.850	WB9TRO/R	C	C E CA PL L X	* WERA	02/19/97
EAU CLAIRE	NW	443.300	KB9R/R	O	* KB9R	04/06/97	TOMAH	SW	444.850	KB9EBX/R	O	PL167.9	* KB9EBX	01/23/97
MILWAUKEE	SE	443.300	KG9CS/R	O	* KG9CS	02/08/97	MILWAUKEE	SE	444.875	WB9TRO/R	O	PL127.3 E	* W.E.R.A.	05/22/96
WAUSAU	NC	443.325	KA9SOT/R	C	* KA9SOT	12/01/96	SUPERIOR	NW	444.900	WA9KLM/R	O	A E	* WITC ARC	03/11/97
MADISON	SC	443.400	N9KAN/R	O	* S.W.R.G.	03/29/96	WAUPACA	NE	444.900	N51IA/R	O	PL114.8	* N51IA	05/14/97
GREEN BAY	NE	443.500	KB9AMM/R	O	* TEARUG	04/06/97	EAU CLAIRE	NW	444.925	N9RSU/R	O	PL67.0 A	* N9RSU	03/15/97
SPOONER/HERTE	NW	443.500	KB9OHN/R	O	* BARS	04/06/97	MADISON	SC	444.925	WB9TAE/R	O	PL123.0 CA DS EL	* WB9TAE	06/10/96
PORT WASHINGTON	SE	443.525	WB9RQR/R	O	* OZARES	04/06/97	MILWAUKEE	SE	444.925	N9NGI/R	O	PL127.3 CA E Z	* N9NGI	05/20/97
MILWAUKEE	SE	443.550	N9LKH/R	O	* N9LKH	05/20/97	RACINE	SE	444.950	WA9BDX/R	O	PL114.8 E	* WA9BDX	03/19/96
BLACK RIVER F	NE	443.600	N9JCX/R	O	* N9JCX	04/29/97	MARSHFIELD	NC	444.975	AA9BN/R	O	E L147.18	* MAARS	01/14/96
APPLETON	NE	443.650	W9IEI/R	O	* F V VHF	05/30/97	WAUSAU	NC	906.000	W9BCC/R	O	X	* R.M.R.A.	05/14/97
CAMERON	NW	443.650	N9KOR/R	O	* N9KOR	05/22/96	STURGEON BAY	NE	908.000	WB9YUY/R	O		* WB9YUY	04/07/97
NORTH FREEDOM	SC	443.675	KD9UU/R	O	* S.W.R.G.	03/29/96	WAUSAU	NC	1250.000	KB9RFT/R	O	EL FM-ATV	* RMATS	06/04/97
LUXEMBURG	NE	443.700	KA9BLI/R	O	* N9DKH	10/19/96	JANESVILLE	SC	916.000	N9HF/R	O	FM VIDEO	* N9HF	03/07/97
CEDARBURG	SE	443.750	WA9POV/R	O	* WA9POV	06/02/97	STURGEON BAY	NE	1282.100	WB9YUY/R	O		* WB9YUY	04/07/97
GREEN BAY	NE	443.750	N9IE/R	O	* RRU	09/09/97	GREENDALE	SE	1282.500	KD9Y/R	O		* KD9Y	06/10/96

# ARRL to continue push for federal preemption

The ARRL Executive Committee has voted to have the League continue to urge adoption of the antenna regulatory preemption policies contained in its petition, RM-8763. The action came on a motion from ARRL Vice President Steve Mendelsohn, W2ML, as the Executive Committee met October 11 in Philadelphia.

The League's petition, filed in February 1996, seeks enhancement of the PRB-1 limited federal preemption of state and local regulation of Amateur Radio antennas. However, the FCC appears to have made no progress with regard to the petition, which asked the FCC to declare that localities must find the least restrictive means to deal with ham radio. Among other things, the petition called on the Commission to amend Section 97.15(e) of the rules to say that any state or local antenna restrictions limiting ham radio antennas to heights below 70 feet would be "presumed unreasonable," unless the state or local authority could show its restrictions were necessary for health, safety or aesthetic reasons.

It was also announced at the Executive Committee meeting that the League will submit comments in Mass Media Bureau Docket 97-182 supporting a comprehensive antenna facilities siting policy, including amateur antenna structures.

The ARRL also continues to pursue FCC preemption of local and state attempts to regulate in the area of RF radiation safety.

The Committee also was told that numerous comments, most of them supportive, were filed on the ARRL's petition (RM-9150) seeking to improve the FCC's handling of private-sector complaints of serious amateur rules violations. The League has filed reply comments in the matter.

In other matters, the Executive Committee responded to a request from Southwestern Division Director Fried Heyn, WA6WZO, that the ARRL study a possible expansion of the existing special event call sign program to include call signs other than the 1x1 format now available. ARRL Executive Vice President David Sumner, K1ZZ, told the Committee that demand for 1x1 special event call

signs has been low. Just 54 call signs were coordinated during the first six weeks of the new program that lets clubs or individuals reserve 1x1 special event call signs for temporary use via the Internet. Sumner noted, however, that there is some demand for special event call signs outside of the 1x1 block.

- will recommend to the ARRL Board of Directors the creation of the category of International member that would encompass present Associate members who are licensed but are not eligible for Full membership. In addition, the Board will hear a recommendation to have the International Affairs Vice President "bring to the Board the concerns of members in other countries."

- will recommend to the Board that the Technical Excellence Award be renamed the Doug DeMaw Technical Excellence Award, as requested by several members who have earned this award.

- agreed that the League will file in opposition to a waiver request and petition for rulemaking by Sierra Digital Communications Inc. Sierra Digital Communications seeks increased power for its product -- an unlicensed point-to-point data communications link operating under Part 15 rules at 24 GHz.

- voted that the President and Executive Vice President shall develop a plan to reinstate the strategic planning process.

The ARRL Letter, 10/24/97

## Where's the Loop?

What would you do in this condo? I tried the whip on a box and the whip in the window with a coiled tail. Only the TV in the next condo heard me 59. A ham with an OmniLoop just lying on his roof was talking to everybody. So I put one up during the SuperBowl when all the neighbors were busy, fed it with coax. Now I'm getting out on 40 thru 10. Add \$8 S&H.

20m \$59 40m \$79 75 or 80m \$99 160m \$139  
AntennasWest Technote S7 Info S1  
Box 5062, Provo, UT 84605 Order Hotline 800-926-7373



## New Products

### ICOM IC-T7AHP DUAL-BAND HAND-HELD

Available now, Icom's IC-T7AHP dual-band (two meters/440 MHz) handheld transceiver now comes standard with a BP-173 battery pack, enabling it to have four watts of output power. Coupled with its other features, the IC-T7AHP offers hams a "high powered" compact handheld with VHF and UHF capability.

With a height of about four inches, the palm size radio is designed for both convenience and easy operation. The keypad is well spaced, and comes with a "thumb touch" lock switch and "single push action" feature selection (no function key). Changing bands may be achieved by simply depressing the band key to toggle between two meters and 440 MHz.

The radio may be small, but it packs a huge load for its size. Storing up to 70 channels in any combination of VHF or UHF frequencies, this handheld has nine DTMF (dual tone multi-frequency) memories for autodialing. It also provides 50 separate encode and decode frequencies as well as a tone scan function for easy subaudible tone selection.

The HT's large alphanumeric display offers easy access to information such as remaining battery voltage. In addition, this handy unit also comes with a helpful "guide" function for quick assistance on operation questions. Other benefits of the IC-T7AHP include an optional microphone simple remote control function, auto power OFF function, and optional cloning software for programming memory channels.

Contact your local Amateur Radio dealer. Visit Icom's Web page at <http://www.icomamerica.com>

# SSB

SELL SWAP BUY

OUR WANT ADS GET RESULTS

FOR SALE: Collins KWM2A (round emblem), PM-2, XTAL pack, CC-2 Samsonite case, and manual, \$595.00. Kenwood TM-2530A 2M mobile, 25 watts, \$185.00. Radio Shack HTX-202 HT with speaker/mike, \$175.00. Herman J. Ludvik, W9HJV, 1311 S. 15th Street, LaCrosse WI 54601. (608) 782-2029.



# The Computer Corner

By Stan Kaplan, WB9RQR

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Port Washington, WI 53074-9654

(414) 284-9346

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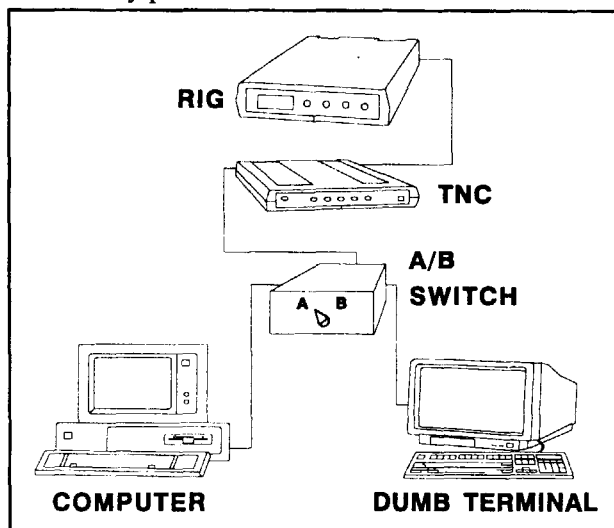
SKAPLAN @ MCW.EDU

## No. 48: Packet Radio Revisited

Packet radio is not dead! Aside from acting as the ham radio equivalent of a telephone answering machine, packet is extremely important in emergency services. During times of local emergencies or disasters when phone lines are down, it can provide the only error-free, highly efficient method to communicate large amounts of data from one place to another. As the Emergency Coordinator (EC) for Ozaukee County, I can relate that we consider packet radio as key in our training and preparedness. Even if you are not involved with your local ARES group, packet is an interesting and fun ham radio medium. This article covers some of the general approaches you can take to setting up your packet system, and revisits some of the guidelines I wrote about in No. 15 of this series, *HOW TO NOT USE A COMPUTER*, back in October 1994.

The components of a packet radio system include a transceiver (an HT will work fine), a Terminal Node Controller (TNC - watch for a bargain at the next swapfest!), and a terminal or computer or both. Indeed, as I am typing this, I can look slightly to my left where a ADM-5 Dumb Terminal is showing packet activity on it's screen. If I wish, I can slide over to it's keyboard

quency. Similarly, incoming messages will appear on the screen. However, a dumb terminal is not a computer. It can be used to send and receive stuff, but once the messages scroll off the screen, they are gone forever. This device has no floppy or hard drive to record incoming messages (though the TNC will record messages addressed to your packet mailbox), or to prepare and store messages prior to sending them out. It is a keyboard and screen only - useful, but limited. Therefore, at my QTH, I use a dumb terminal as a display device, so that I can see what is going on on the frequency or to access messages held in the mailbox of my TNC, without tying up the computer. A flick of the A/B switch shown in the diagram takes the dumb terminal off line and connects the TNC to my computer, allowing me to save messages to disk or to send out messages that I have already put on disk.



On the other hand, at this point in history it is quite feasible for you to have a spare, dedicated computer for packet. XT and 286 class computers are now antiques, and can be had free in most places around the country, while 386s can often be purchased for around \$20. Even the lowly XT is perfectly usable for packet. See what

group, sniff around and see what you can find. I completely rebuild scrounged 386 and 486 computers and provide them free to my OZARES members who wish to set up packet stations.

A word or two about a dedicated packet computer, if you manage to scrounge one. First, the whole packet station (including the computer) should be on 24 hours a day, especially if you are using it for ARES purposes. Therefore, you should disconnect the hard drive. Here is why.

Hard drives always run when the computer is on, whether you are reading and writing data or not. Therefore, they are always consuming energy and slowly wearing out. On the other hand, floppy drives automatically turn off when not in use, saving energy and wear and tear on both the drive mechanism and the surface of the floppy disk. Furthermore, you really gain nothing by using the hard drive in a dedicated packet computer; a floppy based computer will work fine. Even if you have only a single 360kbyte floppy drive, as in an old XT computer, everything you need will easily fit on a single disk. You can get the operating system, several important DOS external files and YAPP (Yet Another Packet Program - the most widely used packet program in the world, by Jeff Jacobsen, WA9MBL) all on a single disk with plenty of space left for lots of incoming and outgoing messages. The YAPP program itself is only about 30 kbytes in size, and even with all the ancillary files it only occupies about 50 kbytes of space, easily manageable on a 360 kbyte floppy.

Need help setting up the floppy? Write me a note describing the type of computer you have (IBM and compatibles, only), including the size and number of disk drives (360kb, 720kb, 1.2Mb or 1.44Mb). Be sure to indicate which is the A: (boot) drive. I will prepare and send you the packet-ready boot disk. No charge, of course. How's that for an offer? Happy packeteering!

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## Mayors on both coasts laud ham radio

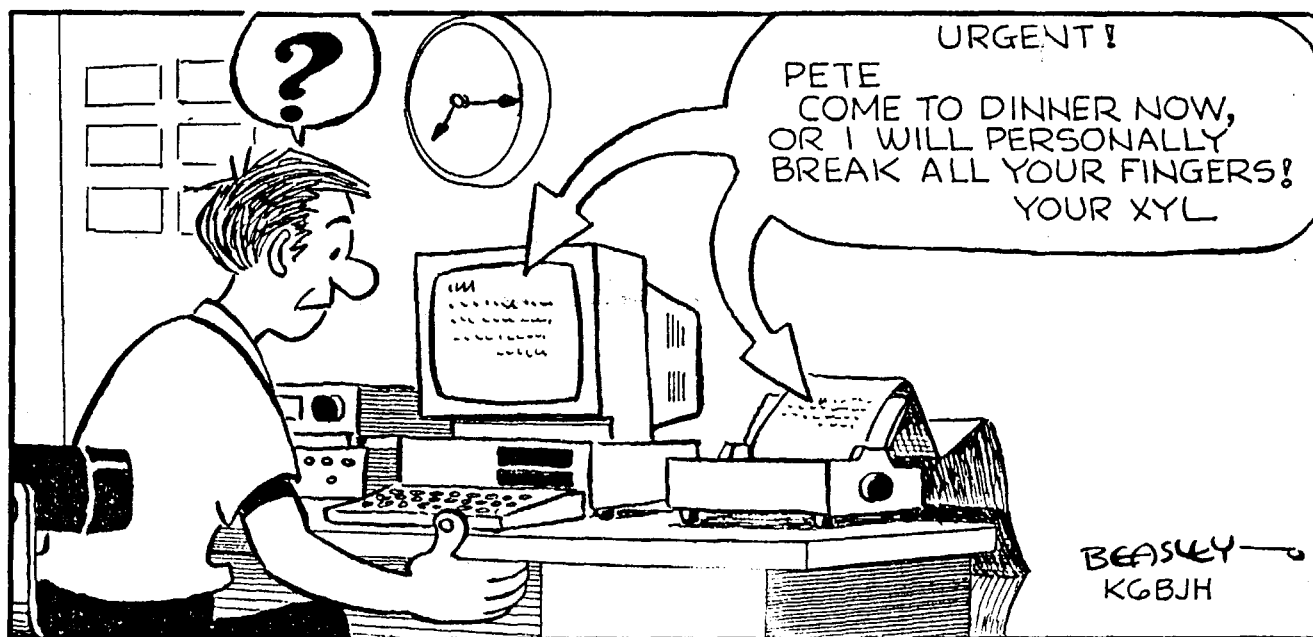
For the second time in his administration, New York City Mayor Rudolph Giuliani recognized Amateur Radio by issuing a proclamation declaring Amateur Radio Awareness Day in the Big Apple. The September 19 ceremony was attended by Howard Price, KA2QPJ, NYC ARES EC for media and public relations/NYC RACES deputy radio officer; Charles Hargrove, N2NOV, Staten Island EC/radio officer; Matt Evans, WA2UKM, Brooklyn AEC; Scott Swanson, N9SAT; John Kiernan, KE2UN; and Jerry Cudmore, K2JRC.

On the West Coast earlier this year, San Francisco Mayor Willie Brown praised a local ham radio emergency organization during a meeting of the City and County of San Francisco Disaster Council in late April.

"I must also tell you that I have been frankly fascinated with that unpaid group of people with those ham radios, the Auxiliary Communications Service," the mayor said. Brown said that the ACS makes available "a wireless system that seldom if ever can be totally disrupted by a disaster" and that "ham radio operators are the heart and the soul and the life blood of that system."

-- thanks to Barry A Schwartz, N2SHP,  
The Hudson Loop, and  
Dave Larton, N6JQJ

The ARRL Letter, 10/10/97



## Virginia hams tell "How to Succeed in Zoning"

Hams in Virginia's Rockingham County were rewarded earlier this month for their efforts to get Amateur Radio towers excluded from a new zoning ordinance being drawn up to deal with the proliferation of cellular telephone towers. Teamed with an ARRL Volunteer Counsel and another ham-attorney, the group quietly lobbied the county officials responsible for drafting the ordinance, so they could head off any problems at that level instead of waiting for a public hearing.

Paul Helbert, WV3J, is a member of the Massanutten Amateur Radio Association of Harrisonburg, Virginia. "The most important thing we did, I think, was to go to the board members, the county's attorney and planning staff during the week before the meeting so that they had no surprise and no mystery as to our concerns," he said. Helbert credits ARRL Volunteer Counsel Paul Schwartz, KB2XX of Charlottesville, and Staunton attorney Charlie Garner, WA4ITY, for coming up with the approach.

Helbert says he found out about the proposed ordinance almost accidentally during a conversation with Bill Fawcett, WB4PWP, who's involved with commercial radio. The draft ordinance placed restrictions on the placement, erection, and maintenance of radio transmitting facilities, including antennas, towers, poles, and other support structures. The proposal was especially hard-hitting to radio transmitting installations in residential areas. The original draft made some concessions to ham radio by excluding ham towers less than 50 feet tall. Other provisions would have made it prohibitively expensive for most hams to erect a tower taller than that.

elbert helped spread the word among area hams who, in turn, contacted individual supervisors and the Board chairman. Garner helped draft a resolution on behalf of

the Valley Amateur Radio Association and the Waynesboro Repeater Association. The Massanutten Amateur Radio Association executive committee also presented arguments to members of the county board.

"At all times were the hams polite, courteous, and in no way confrontational," a story in *The MARA/VARA Monitor* reported. "The purpose of all this activity was not to appear adversarial [but] to simply remind the government officials of the hundreds of hours hams had spent in emergency communications support and to politely inform them that the de facto 50-foot limitation on ham towers would inhibit some hams' ability to provide that service in the future."

More than 40 hams -- well identified with name and call sign badges -- turned out at the September 24 meeting of the Rockingham County Board of Supervisors. Five, including Helbert and Garner, spoke on their behalf. The Board commended the ham community for its public service and remanded the proposed ordinance to the Planning Commission for a rewrite, this time to include a complete exemption for ham radio antennas. The Planning Commission adopted the changes October 9.

As an unexpected and unrequested bonus, the county Board of Supervisors also struck an existing zoning law provision that required hams to obtain a special use permit to erect a tower.

As ARRL Regulatory Information Branch Manager Tom Hogerty, KC1J, observed: "This is a good example of how hams should interact with their city and town governments when dealing with zoning issues."

The ARRL Letter, 10/17/97

## Help Wanted Inside Sales

Experienced, enthusiastic salesperson. Consumer Electronics Telemarketing/Retail Sales. Keyboard Skills helpful. Outstanding benefits. AES, 5710 W. Good Hope Rd., Milwaukee, WI 53223. FAX: (414) 358-3337.

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# Hales Corners tower hassle

Continued from front page

Prior to purchasing his home in Hales Corners, N9AW researched the village's ordinances and zoning regulations and specifically asked the Building Inspector if he could erect a 48 foot tower on the property. After providing details of the proposed location of the tower base and the manufacturer's specifications, he was told everything would be fine. "Yeah, I really pulled a dirty trick -- I checked out the law and then fully complied with it," Scherkenbach cracked.

Although the complaining neighbor didn't have the courtesy to say anything to N9AW's face (nor even to send him a copy of his letter to the Village President), the day after the newspaper article appeared, Jerry went to the Village Hall and obtained a copy of the minutes of the August 18th meeting of the Village's Plan Commission which stated:

"Mr. Chamness noted July 19 correspondence from Kent Anderson expressing a desire for improved regulation of communication towers. A recent ham radio tower was erected in a subdivision at a height of 48 feet. Mr. Chamness noted that there have been few incidences of persons erecting such structures in the Village over time. A brief review of other communities found that there is a wide range of regulations.

"Mr. Ryan passed the gavel to Mr. Munson to speak on this matter. He indi-

cated that the introduction of such a structure in a residential neighborhood offends the character of the neighborhood. The concern for aesthetics is matched by a concern for the potential of interference with other TV or radio signals for the surrounding neighbors. A safety concern was also expressed in the event of tower failure. Mr. Ryan felt that it may take some time to review proper regulations for such installations and that some type of moratorium may be appropriate until that work can be completed. It was moved and seconded (Ryan, Besson) to recommend to the Village Board a moratorium on radio and TV antenna installations exceeding the height of 10 feet above the roof line of the principal structure, in order to review appropriate regulations for said installations in terms of public health and safety, aesthetics, land values, and the legal right of owners to have such installations. Atty. Wesolowski would be consulted on the appropriateness of such a moratorium. Motion unanimously approved."

Upon reading that, N9AW asked the Village Clerk for a copy of the letter of complaint that his neighbor had sent to the Village's Plan Commission. He was told "We'll have to look into that."

Over the next few days, Jerry Scherkenbach, N9AW, searched the World Wide Web for copies of the FCC's PRB-1 (which limits the ability of state and local authorities to use zoning regulations to restrict Amateur Radio) and the FCC's

informational materials on TV. (He also contacted Rick Kissell, WB9GYT, for information about the Milwaukee Radio Amateurs' Club's fight against the new City of Milwaukee ordinance restricting new tower erection. Rick had earlier gotten in touch with Jerry about tower construction details.) Scherkenbach also updated an old ARRL document explaining ham radio and presented all those materials to the September 8th meeting of the Hales Corners Board of Trustees (equivalent to a city council) with copies going to the Village Attorney, Building Inspector, and Village Administrator. N9AW also contacted all the licensed hams in Hales Corners who had listed phone numbers.

All that effort paid off when the Village Board voted unanimously to reject the proposed moratorium on new tower construction and referred the entire matter back to the Village's Plan Commission "for further study."

On October 2, N9AW and approximately half a dozen other Hales Corners radio amateurs met with the Village's Building Inspector to discuss the amateur radio community's needs in the area of towers and antennas. "The outcome of that is he is going to draft revise tower zoning ordinances," said Jerry. "He is going to send us copies of his proposed revisions prior to the next meeting of the Plan Commission." When asked point-blank if he was leaning toward lowering the maximum allowable height (currently 60 feet, including antennas), he said no. When asked about changes in the ratio of height to distance to adjacent lot lines (currently three-to-one), he replied "I'm not sure."

That's where the matter stands at press time. □

## Happy Thanksgiving

May your holiday be filled  
with the companionship and  
love of friends and relatives  
and leave a warmth that lasts  
through our long Wisconsin  
winters.

## Badger State Smoke Signals

### CARD ADS ARE DUE FOR RENEWAL NOW

Advertising. That's what businesses (and swapfests) do to attract customers or attendees. And it works. How long would a business or swapfest survive if it were a secret? Yup, advertising works. And it costs money to do it. You must spend some money to make some money. For the advertising vehicle (like BSSS), it helps pay the bills. (Each BSSS issue costs well over \$700.00 to make ready, have printed, and mail, times twelve issues per year.)

So, those card ads you see help a great deal to keep this newspaper chugging along. And those ads help your business or event chugging along too. We all benefit.

But there is no benefit if ads are not renewed or no new ads taken. That is where we stand right now.

Last year, when we billed as usual in September, we also gave notice that a rate increase on ads was coming, and that to avoid the higher rates for a few years, multiple year renewals would be accepted, at 5% for 2 years and 10% for three. About five advertisers took advantage of the offer. The rest did not.

The bills for card ads went in the mail in early September. They were followed by a renewal notice in early October. I am sorry to report that, of about 19 bills mailed, we have received a total of seven renewals. Seven. That is not good.

Next come phone calls. Very likely about \$100.00 worth before I finish making them all, because of "telephone tag" and other "retries." I GET THAT MONEY RIGHT BACK FROM BSSS.

So, which costs less and helps the paper and your business more? I don't need to finish connecting the dots, do I?

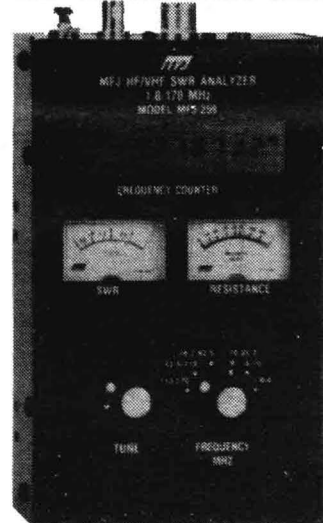
We sure hope to hear from you soon. Otherwise, in January, the back page and some inside pages will be a vast wasteland. And we will be forced to again raise subscription rates. We do not want to do that. No way.

You know who you are if you received a statement. Please don't force our expenses any higher. Thanks, and send your remittance to K9ZZ per the statement.

Jim Romelfanoer K9ZZ, Editor

## MFJ HF/VHF SWR Analyzer™ with RF Resistance Meter

Read your antenna SWR from 1.8-170 MHz... 10-digit LCD frequency counter...  
RF Resistance Meter™... smooth reduction-drive tuning... simple-to-use...



**MFJ-259**  
**\$239.95** with antennas, MFJ's revolutionary new SWR Analyzer™ is the best investment you'll ever make! Now you can diagnose a wide range of antenna problems instantly with one easy-to-use instrument.

### What the MFJ-259 Does

The MFJ-259 gives you a complete picture of your antenna's performance anywhere between 1.8 and 170 MHz -- you can even check SWR outside the ham bands without violating FCC rules. Set the bandswitch and tune the dial -- just like your transceiver. SWR is displayed instantly!

### RF Resistance Meter™

Does 2:1 SWR mean 25 ohms or 100 ohms? The new MFJ-259 tells you at a glance!

Now you can measure RF resistance up to 500 ohms at minimum SWR -- instantly -- on MFJ's exclusive side-by-side RF Resistance and SWR Meters!

Take the guesswork out of building matching networks and baluns for your antennas.

Watch the effects of spacing on radiation resistance as you adjust your antenna.

### Here's What You Can Do...

Find your antenna's true resonant frequency from the shack.  
Tune the antennas on your

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Tune critical HF mobile antennas in seconds -- without subjecting your transceiver to high SWR.

Measure your antenna's 2:1 SWR bandwidth on a single band, or analyze multiband performance over the entire spectrum from 1.8 to 170 MHz!

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Adjust your tuner for a perfect 1:1 match without creating QRM.

And this is only the beginning! The MFJ-259 is really four test instruments in one: an accurate RF signal generator, a high resolution 170 MHz frequency counter, RF Resistance Meter™ and an SWR Analyzer™.

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MFJ SWR Analyzers™ work so good, many antenna manufacturers use them in their lab and on the production line -- saving thousands of dollars in instrumentation costs! Professional installers and technicians use them worldwide.

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**MFJ-249 MFJ-249 HF/VHF**  
**\$219.95** SWR Analyzer™. Same as MFJ-259 but less RF resistance meter. Includes 10-digit LCD frequency counter, full 1.8-170 MHz coverage and smooth vernier tuning.

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**\$24.95** Tote your MFJ-259 1/249/209 SWR Analyzer™ anywhere with this custom Carrying Pouch. Made with a special foam-filled fabric, it cushions blows, deflects scrapes, and protects knobs, meters and displays from harm.

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# PARTICIPATING CLUBS AND ORGANIZATIONS

## Wisconsin Association of Repeaters

Mark Heimmermann, KF9CS, Secretary  
1523 E. Moonbeam Tr. • Appleton, WI 54915



WAR Minutes  
September 13, 1997

The meeting was called to order at 1:04.

Introductions were as follows:

Mark Heimmermann	KF9CS
Daniel Bolander	WB9TYT
Jim Albrinck	KA9QLP
Dave Knaus	WA9POV
Warren Schall	K9IZV
Virgil Burmeister	WB9MHS
Ray Vollrath	WD9HOD
Jack McLeland	W9ATK
Nels Harvey	WA9JOB

The minutes of the previous meeting were printed in the newsletter. Are there any additions or corrections to the minutes? Dan Bolander mentioned that he was at the meeting but not listed. Please note that the minutes for the last meeting should be amended to indicate Dan Bolander, WB9TYT, was present.

### Treasurer's Report

Balance at end of May	\$2,487.30
Membership Deposits	265.00
Interest	14.53
June Newsletter	196.07
Coordinator Expenses	75.50
Secretary Expenses	25.00
The EOM balance for August	\$2,470.26
September Newsletter Cost	209.28
Present balance	\$2,260.98

The chair will entertain a motion to accept the treasurer's report. The motion was made, seconded and approved by the members present.

### Newsletter Report

Ray indicated that everything is going smoothly. November will be especially busy for Ray and the newsletter deadline is the 20th.

Dave Knaus said that Bob Schmidt, N9GMT, should be credited at all times with the account for the WAR web page. Thanks, Bob.

### Coordination Report

Many trustees were sent letters this past week asking them for clarification or updates on their frequencies. Dan has

received quite a few back already and has updated the records in the database. There are over 100 frequencies involved. Coordination has been coming along real well. Coordination with Illinois has been moving great lately. Dave and Dan talked about how often the listings on the WEB page should be updated - every three months or once a month. Nels suggested that we make a policy of not going over three months without updating on the board. If Dan has the time he will update the web page more often.

The Bob Schmidt's, N9GMT, repeater system has been properly updated and he is current.

### Chairman's Report

Regarding the NFCC, the deadline was the day after the meeting and I put the vote in on the Internet. I voted in favor of the proposed changes and organizations. There were three sections that had to be voted on: one failed with 67% in the affirmative, one failed with 71% and another with 73% in the affirmative. The minimum to make it accept would be 75% which is pretty stringent. The accuracy of the frequency coordinates for a repeater were required to be within a tenth of a minute. There are new proposals to make it within three tenths of a minute now or just leave it open ended. The number of things on the computer database to be made available has been narrowed down to virtually nothing more than we send in to the ARRL for the repeater directory.

Due to health reasons, Nels Harvey has decided not to accept the nomination for WAR chairman in 1998.

### Old Business

No old business.

Placing the newsletter on the WEB was discussed by the members. Dave and Ray will workout the details and try placing last month's newsletter on the site.

### Next Meeting

The next meeting will be held in the Appleton area on Saturday, December 13. The details will be in the Chairman's column.

The meeting adjourned at 2:17 p.m.

WAR Minutes respectfully submitted by:  
Mark Heimmermann  
Secretary

## Wisconsin Valley Radio Association

Kim Kunze, N9SDL, Secretary

P.O. Box 363 • Wausau, WI 54402

**Six Meter Repeater: 51.19 Input/52.89 Output**

Meeting Minutes  
October 7th, 1997

The meeting was called to order by Jim, N9SDI. Members present were N9SDL, KB9DZG, KB9FRB, N9LIA, N9IAB, N9TTA, KB9OUC, N9OWD, KB9DED, N9NMH and N9MEA. The minutes from last month's meeting were approved by members and motion by N9TTA and 2nd by N9NMH. Treasurer's report was approved after a motion by N9LIA and 2nd by N9TTA.

Up coming events were discussed such as Special Olympic Winter games to be held February 21 and 22, 1998. Badger State Winter games on February 7 and 8 1998. Will be looking for communications volunteers for these events.

Thanks from KB9DED to KB9DZG and KB9FRB for helping out at the Ice Age Walk. Thanks also from N9SDI to all the hams that provided communications at the Gear Grinder Classic bike race.

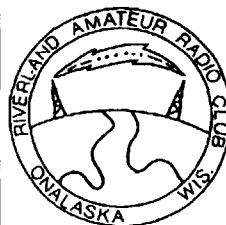
Under old business the status of the 6-meter repeater was discussed with KB9DED going to make arrangements with WX9W to remove it for needed work. Past meeting minutes were reviewed for the amounts of money approved for the work. Up to \$680 for the repeater and up to \$100 for the control heads were the amounts.

ARRL affiliation is where we are now as N9SDI received the confirmation.

We need someone to coordinate and

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## Riverland Amateur Radio Club



Dan Abts, N9PZC  
Secretary

Club mail address: P. O. Box 621  
Onalaska WI 54650



<http://www.lse.fullfeed.com/~rarc/counties.html>

MEETING MINUTES  
October 7, 1997

The October meeting of the Riverland Amateur Radio Club was called to order at 7:03 p.m. on October 7, 1997 by President Duane, W9HWQ. There were 16 members in attendance.

The minutes of the September meeting were accepted as read by Dan, N9PZC.

Roger, KA9BKK, gave the treasurer's report. We have 73 members. The report was accepted as read.

Programs: There was just a social hour this evening.

444.475 Repeater: Kent, W9LZQ, reported the cost estimates for repairing the repeater. They seemed reasonable so the repeater will be repaired.

Net Manager: Duane, W9HWQ, relayed a message from Pete, N9XVG, that the net is going well.

ARES/Skywarn: Kent, W9LZQ, talked about a drill that is taking place in Houston County on October 25th. Red, WO0W, is coordinating the event and needs 11 ham operators to volunteer to help provide communications. This is a big event involving the CAP at the airport, the EOC at Caledonia, lost people at Oak Ridge, and people at Wild Cat Park at Brownsville. It will involve people on ATVs, horses, and on foot.

There will also be an exercise this spring involving all the emergency agencies in the Emergency Collaboration organization for La Crosse County.

Property Manager: Bob, N9LZK, reported that our generator worked fine in the Torch Light parade and we should

consider pulling the club trailer in the Maple Leaf parade for publicity next year. 146.97 Repeater: Walt, AA9AW, was not present but the repeater is working fine.

Field Day: Nothing new.

VE: Roger, KA9BKK, said that tests are scheduled for Thursday, October 23rd at 6:30 at the Onalaska Public Library. There will also be tests on November 22nd but the time and place have not been determined yet. Call Roger at (608) 783-0723 for more information.

### Old Business

Tom, WB9BJQ, made a motion to spend money on lightning protection for our repeater sites. The motion was seconded by Bill, KE9XQ, and passed.

Bill, KE9XQ, moved that we reconsider the purchase of VHF/UHF and HF transceivers. The motion was seconded by Bob, N9LZK, and passed.

### New Business

Dick, K0JYB, announced that we have reservations for the annual dinner/awards ceremony at the Lighthouse Restaurant at Knob Hill on January 17, 1998. Duane, W9HWQ, wants suggestions for who should receive Elmer awards.

A motion was made at 7:57 p.m. by Bob, N9LZK, to adjourn the meeting. The motion was seconded by Kent, W9LZQ, and passed.

Respectfully submitted:  
Dan, N9PZC

## Mancorad Radio Club

Dave Shemchak, KB9KQA,  
Secretary

P.O. Box 204 • Manitowoc, WI  
54221-0204



**2-Meter Repeater: 146.01 Input/146.61 Output**

MEETING MINUTES  
October 8, 1997

Janice, N9IQZ, brought the October meeting of the ManCoRad Amateur Radio club to order at 1935 hrs.

As there were no new members present, and the usual bunch was there, we skipped the introductions.

Ken, K9HAG, made a motion to accept the Minutes from the September Meeting, as printed in the *Badger State Smoke Signals*. The motion was seconded by Red, N9GHE.

Glenn, AA9MT, reported on the status of the treasury. A motion to accept Glenn's report was made by Swanee, N9QFY, and seconded by Bob, KB9INK.

Last month, as you recall, we were asked by the Manitowoc Maritime Museum if the club would be interested in restoring the radio equipment aboard the USS Cobia (a WW II submarine of the same class produced in Manitowoc). Red, N9GHE, has been in to look at the radio equipment. There are approximately 10 receivers and 2 transmitters. Red did pick up some replacement tubes and some other information about the radios, however there is much more to be done! If anybody reading this has experience with these radios or has tech manuals they would be willing to loan us, or otherwise knows something about this equipment, please

contact me at: KB9KQA@MTWBBS or dpshack@lakefield.net or Red at N9GHE@MTWBBS or pajular@lakefield.net

Clancy, K9WIX, reported on a couple of recent emergency drills held in the county. The first drill, simulating a nuclear emergency went relatively smoothly. The second drill, simulating a HazMat emergency, failed. It failed on our end because nobody was available to respond. The members who have the emergency government pagers all happened to be out of state at a hamfest, and therefore weren't able to respond to the page. Emergency government failed to call the reverse autopatch (the reason the autopatch was established).

The November meeting is when the club traditionally elects officers. Janice, N9IQZ, appointed Patti, KB9NNX, Red, N9GHE, and Roger, W9NPX, to the nomination committee. These three will be calling the rest of the current club membership and asking you to participate in your club by becoming an elected officer. The positions available are: President, Vice President, Treasurer, Secretary, and 3 elected board members. So when the nominating committee calls, be ready to tell them which position you are going to run for!

I've said this before, but - in light of

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## ManCoRad Radio Club

Continued from page 10

the last two paragraphs, I'll say it again! We have 70+ members in our club. Judging by the number of members who consistently show up for meetings, who consistently volunteer for those events that we do manage to put on - you would think we only have 30 members. I have had my ticket for just about 2 1/2 years now and have been a club member just as long. In that time I have: instructed the Novice/Tech license classes; participated, as liaison, in the SkyWarn nets; attempted to organize a Field Day; participated in our Special Event Station; participated in Hamfest operations; and accepted the position of club Secretary! There are many more activities I would like to participate in but my erratic job schedule doesn't allow it. The point here, is not ego gratification, but to illustrate that even a new ham (new club member) CAN get involved! To paraphrase one old-timer (and longtime club member) if we don't get more participation by ALL members (old and new) there won't be a club! Please keep this in mind when the nominating committee calls and asks you to run for an elected position, or when Clancy asks for volunteers to help with R.A.C.E.S. or when the club puts on an event!

The club's annual Christmas party will be held on December 13th at Cedar Ridge in Maribel. (Exit 164 west off of I-43) Tune up time from 5:30 p.m. to 6:30 p.m. with a dinner of Chicken and Ribs at 6:30 p.m. Price is \$9.00 per person. Contact Glenn, AA9MT, for tickets. Please sign up early so we can give the folks at Cedar Ridge an accurate count before December 13th. Everybody is welcome, so come and join us for a good time!

November is also the month when membership Dues come due. Although the

Badger State Smoke Signals raised its rates, your Board voted to hold the line on membership dues. The rates are as follows: \$20.00/year, Single; \$30.00/year, Family; and \$10.00/year Student.

Chuck Scholten, W9BZU, recovering from some serious health problems, is residing at Woven Hearts on Vista Road in Manitowoc. If you're in the area, stop in and say Hi! (BSSS editor's note: Please do likewise for me. - K9ZZ)

A last reminder. Next month, November, is a busy month. Come and elect your club Officers, bring your checkbook (Glenn always likes that!) and pay your dues and get your reservation for the Christmas party!

Glenn, AA9MT, made the motion to adjourn the Meeting, Ken, K9HAG, seconded the motion. The October Meeting of the ManCoRad Amateur Radio club was adjourned at 2007 hrs.

Submitted for Approval  
David P. Shemchak, KB9KQA, Secretary

### Meeting Attendance

Glenn	AA9MT
Janice	N9IQZ
Dave	KB9KQA
Patti	KB9NNX
Mary	KB9GOY
Theresa	KB9KXE
Dick	N9QFY
Clancy	K9WIX
Ken	K9HAG
Gene	KB9KXF
Bob	KB9INK
Ron	WS9X
Bill	N9XEZ
Bill	K9DUX
Chuck	N9WUN
Paul	N9QFX
Fred	W6BSF
Roger	W9NPX
Denise	N4WGK
Red	N9GHE

## Wisconsin Valley Radio Association

Continued from page 10

secure VEs for the testing session to be held on December 15th at 7:00 p.m. with sign up at 6:30 at NTC room 207. Our intent is to at a minimum be able to offer tests for the students currently participating in the No Code Technician class and hopefully offer testing for all classes of license. Please help out by offering to do this. Give me a call.

KB9DED is chairing the committee to prepare a parade float for the annual Wausau Christmas parade. Give him a call if you can lend a hand.

Bring any donations of gifts for the North Central Health Care Facility residents to the next WVRA Club meeting.

We will deliver them after the December meeting.

N9SDI is preparing a New Member Packet / Prospective Member packet that the club can provide that tells who we are and what we are all about.

The program for the November meeting is a 6 meter project by N9MEA.

Please note the meeting location is at Wausau Metals at least through December.

The meeting was adjourned after a motion from KB9DED and 2nd from N9LIA.

N9SDL provided the program after the meeting demonstrating AEA's Log Windows 3.0 logging software. It was a taste of what some of the capabilities these type of programs offer.

Respectfully submitted:  
Kim Kunze N9SDL

## Washington County Amateur Radio Club

Tom Waldschmidt, N9LZW,  
Secretary  
465 Elder Lane  
Allenton, WI 53002-9799

Club Repeater: 146.73 MHz

<http://www.nconnect.net/~WCARC>

### MEETING MINUTES October 9, 1997

The October 9, 1997 meeting of the Washington County ARC was called to order at 7:30 p.m. by Christopher Beck, N9ZES, our Vice President. There were nine members present.

There was a motion by Rip, W9SIZ, seconded by Bill, N9IBU, to suspend with the reading of September's minutes because they were unavailable.

The Treasurer's Report was read by Treasurer Dave, KA9RNU. There was a motion by Sherm, W9NGT, seconded by Bill, N9IBU, to accept the Treasurer's Report. Motion carried.

### ARES Report

Washington County Emergency Coordinator Walt, N9LLS, gave an ARES report. Walt reported that he visited with the Civil Air Patrol (CAP). He is planning a joint exercise with the CAP in the near future. Walt also reported that November 9th is the Hartford Christmas Parade. We will need volunteers to sign up now since

we will have no other club meeting before this event. The parade route will begin from the former Chrysler plant and will follow the rebuilt STH 60/Sumner St. The governor has been invited.

### Repeater Committee

Don, K9GR, reported on the repeater status. He explained that we have an opportunity to purchase a used duplexer for our repeater. This will help to improve the existing repeater's efficiency.

### OLD BUSINESS

#### Banner

Walt, N9LLS, reported on the banner situation. The file for the banner is not available. Don, K9GR, suggested that it be taken off the club's Web Page.

### NEW BUSINESS

Dave, KA9RNU, reported that the

Please turn to page 12

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### MEETING MINUTES October 8, 1997

The meeting was called to order at 7:30 p.m. by Robert Baird (W9NN). Approval of the minutes of the September meeting was tabled until November because they were not published in *Badger State Smoke Signals*. A copy will be available at the November meeting. Mr. Baird (W9NN) read the treasurer's report in the absence of Joe Larson (N9JW).

Mr. Baird also reported the status of repeater 146.985, which is operating satisfactorily.

Al Mallek (K9WVM) will order a parts kit and rebuild the club HF beam as approved previously.

Questions arose as to the financial status of our last swapfest. It was suggested that, perhaps with a more comprehensive financial report, we can direct our efforts to a segment that would generate more income.

With an upcoming disaster simulation, it was necessary for Mr. Baird (W9NN) to appoint Jerry Fadness (W9GF) and Mike Eiden (WD9JID) to serve as interemergency - coordinators until the November meeting, when a permanent appointment will be made.

Al Mallek (K9WVM) and Wayne Johnson (K9MIF) agreed to obtain a list of

restaurants, prices, and menus from which we will choose where the annual banquet will be held. They will have this information for us at the November meeting.

Mr. Baird (W9NN) read a letter from Joe Larson (N9JW). Joe writes that he has a large and enthusiastic group of students in his "Discovering Amateur Radio" class which is held Wednesdays at 7:30 p.m. in the UWSP science building.

### MEMBERS IN ATTENDANCE

Mike Eiden	WD9JID
John Feltz	W9JN
Art Wysocki	N9BCA
Wayne Johnson	K9MIF
Dennis Ceplina	KA9RZW
Jim Ceplina	KB9QWF
Al Mallek	K9WVM
David Tamres	KB9IIF
Robert Baird	W9NN
Mary Eiden	KA9FAS
Al Mallek	N9WBS

After viewing the video, Direction Finding Radio, Al Mallek (K9WVM) moved for adjournment; John Feltz (W9JN) seconded, and the meeting was adjourned at 8:38 p.m.

Respectfully submitted:  
Al Mallek, N9WBS

## The Racine Megacycle Club

Club Station W9UDU • Racine, WI

ARRL Affiliated

Providing Communications for American Red Cross and ARES

Mary Urban, N9ZWE, Secretary

c/o RMC • P. O. Box 3 • Racine, WI 53401-0003

### MEETING MINUTES October 13, 1997

The meeting was called to order by President Rob Madson, KF9ZT. The following members in attendance identified themselves:

Rob	KF9ZT, President
Ken	N9WHR, Vice President
Dave	AA9HL, Treasurer
Lee	N9VNU, Activities
Mary	N9ZWE, Secretary
Bill	KB9PUD
Kathy	N9ZWN
Steve	K9ZL
Cheryl	WS9P
Dan	KA9OIL
Jim	W9LXY
Greg	KB9RMA
James	KB9LGA
Larry	WA9JMO
Spencer	W9LDH
Bob	W9EH
Harold	KB9LXM
Arne	KA9ZPY
Alan	N9ZWJ
Jon	KB9PUF
Chuck	KB9JIH
Bruce	KB9QZR
Loren	WB9BWT
Julie	GUEST
Matt	GUEST

The first order of business was welcoming a new Amateur Radio operator, Greg, KB9RMA.

Treasurer Dave, AA9HL, gave the treasurer's report. It was accepted as read. Secretary Mary, N9ZWE, gave her report. She is still looking for Field Day logs previous to 1988 and 1991, 1996, 1997. Also any history items.

Membership dues are coming up January 1, 1998. If someone was late in paying their dues for the year, they would still be due in January. The exception is new members if they are joining the last couple months of the year.

Field Day 1998 for June 28 and 29 has been approved for Larry (WA9JMO's) farm again, and 1998 Amateur Radio and Computer Show on July 26, 1998 at South

Hills Country Club. Both events have been submitted to the *Racine Journal Times* for listing on their Calendar.

The board members decided on a set of election nominating rules at their last board meeting. They have been typed and copies given to each board member for further consideration. There were none on record.

There was an error in the September minutes. Bill, KB9PUD, not Mike, KB9JXX, was selected as a member of the nominating committee. Mike has initially been selected but had turned it down.

Friendly Fest 97 will be held at Waukesha County Expo November 1.

Also, for election purposes, only dues paid members can be nominated, elected, or vote in the November elections.

Chuck, KB9JIH, asked how much dues are and Dave, AA9HL, stated that dues are \$16 with the *Badger State Smoke Signals*, \$7 without.

President Rob, KF9ZT, announced that at the November elections, paid memberships will be checked, and members will have the opportunity to pay their dues before voting. There will be a meeting of the Amateur Radio and Computer Show committee on October 16 at 7:00 p.m. at Dynasty Restaurant on Lathrop Ave.

Also, if you are purchasing at AES give a copy of the receipt to the club. Gift certificates were handed out to the winners of the Field Day 1997 Hidden Transmitter Hunt. First place went to Pete, KB9LXM, and Alan, N9NWJ. Second place, Jon, KB9PUF, got a hand shake (others involved were not at the meeting).

A review of the October 19 Scheduled Fox Hunt was given. Rob, KF9ZT, and Joe, KB9HSJ, were the foxes. Two transmitters were hidden on the north side of Racine about 100 yards apart. Dan, KA9OIL, gave a further report. The first place team was Dan, KA9OIL, Ray, K9RI, and Mike, N9XSG.

The GOODY BOX was retired. Anyone in attendance could take what they wanted and the rest would be put in the big green container outside the building. A

Please turn to page 12

## Racine Megacycle Club

Continued from page 11

NEW item was purchased to be raffled off. Depending on the interest, the value of the item could increase each month. At this time the proceeds will not be kept in a separate kitty. Further discussion will be had in the future on this issue.

A discussion was held on the club scheduling a class in the future. Larry, WA9JMO, stated that we need a commitment from the club that we hold 2 classes a year until the new book comes out (about 4 years). Classes can be held at the Red Cross Building on Sunday evening at 6:30 p.m. The first class will start the end of February and run 12 weeks. Instructors and publicity will be needed. This is important in getting the 501(c)3 class. A discussion was held on the subject. Larry, WA9JMO, proposed the motion and Bob, W9EH, seconded the motion. The membership voted and approved the plan so that Larry, WA9JMO, could order the books. Chuck, KB9JIH, stated that he was interested in a General Class also. Rob, KF9ZT, Bruce, KB9QZR, Lee, N9VNU, and Bob, W9EH, volunteered to help teach the class. Bob, W0WLN, and Bill, W9OVZ, will be asked to help. Anyone else interested, contact Larry, WA9JMO.

Chuck, KB9JIH, introduced his guest, Loren, WB9BWT.

Chairman Bob, W9EH, gave the report on the Amateur Radio Building Committee. They held another meeting September 29. They had a legal adviser present, Mike Kehoe, WB9PZI. They are still in the process of putting together a corporation. Once that is finished they will be applying for a 501(c)3 tax status and putting together a set of by-laws. There is a lot administratively that has to be done before they can start raising money for the building. He could not announce how they will organize the membership at this time. It will take a number of months. They all feel that this can be accomplished. It may take a couple years. This plan will take a lot of work and a lot of money. At some point, everyone will be called on to help out. Contact any of the members of this committee for further information about these plans. There will be a presentation at the Banquet in March 1998. Everyone will be kept posted on their progress.

Rob, KF9ZT, announced that at the board meeting it was decided to hold the

Christmas Party on December 8 at Buona Vita Pizzeria Restaurant at Elmwood Plaza on Durant Avenue (Hwy 11). This will be in lieu of the general membership meeting. (NOTE: The silent key list will be published in January instead of the minutes). It will be held in the meeting room and pizza and soda will be provided by the club for dues paid members and their immediate families. Mary, N9ZWE, will have a sign up sheet at the November meeting. Chuck, KB9JIH, gave a report of the nominating committee and they have no nominations to date for any of the offices of the club. Contact Chuck, KB9JIH, Pete, KB9LXM, or Bill, KB9PUD, if you have any nominations.

Mary, N9ZWE, Secretary and Dave, AA9HL, Treasurer, have accepted nomination for their existing position. Vice President Ken, N9WHR, President Rob, KF9ZT, and Activities Lee, N9VNU, will not accept nomination. These offices are open.

Dan, KA9OIL, reported on the estate of Bruce, K9RRS. Over \$6,000 was turned over to Naomi. Fifteen items are left, including power supplies, TNCs, etc. Contact him for further items available. A box of miscellaneous items from K9RRS estate were auctioned off by N9WHR with the proceeds going to the club. The high bid of \$40 was made by Alan, N9ZWI.

Rob, KF9ZT, asked his FCC rules trivia question. Can a ham get on the repeater and announce, as an example, the liquidation of another ham's estate? It is legal because it is specifically targeted to amateurs. Also, how does someone know that jamming is intentional? See FCC rule book for further information. (There was too much background noise in the room to understand all that was said.) The winner of the first "NEW" item raffle was Greg KB9RMA. The item was a repeater directory, which was ideal for the newly licensed ham.

Arne, KA9ZPY, asked if the board had decided on a new investment plan for the club funds. Rob, KF9ZT, and Dave, AA9HL, said nothing had been decided as yet.

The meeting was closed at 8:25 P.M.

At the meeting, after the meeting, at Reflections Restaurant, it was announced that the new raffle was a great success. Next month's "NEW" item will be of greater value.

Fox Hunt Schedule - Nov 7 and Dec 5

**HISTORY:** October 11, 1976 - RMC affiliation with the ARRL was voted on and passed. ☐

carried.)

A motion was made by Don, K9GR, to adjourn the meeting. It was seconded by Sherm, W9NGT. Motion carried and meeting adjourned at 8:45 p.m.. No program was planned.

Submitted by:  
Dave, KA9RNU, Secretary

### CALENDAR OF EVENTS

Nov 01	8:00 AM	Friendly Fest, Waukesha Cty Expo Cntr
Nov 01	9:00 AM	Breakfast, Corfu Restaurant in Hubertus
Nov 06	7:30 p.m.	Net, 146.730
Nov 08	9:00 AM	Breakfast, Jimmy's in Jackson
Nov 09	1:00 p.m.	Hartford Christmas Parade (can you help?)
Nov 13	7:30 p.m.	ARES Meeting, Courthouse in West Bend
Nov 13	7:30 p.m.	WCARC Meeting, Courthouse in West Bend
Nov 15	9:00 AM	Breakfast, Mineshaft in Hartford
Nov 20	7:30 p.m.	Net, 146.730
Nov 22	9:00 AM	Breakfast, Slinger INN in Slinger
Nov 27	7:30 p.m.	Net, 146.730
Nov 29	9:00 AM	Breakfast, Woodview Restaurant in West Bend



## E.C.A.R.C. eau CLAIRE amateur RADIO CLUB

Carl Searing, W9NW, Secretary  
P.O. Box 1867 • Eau Claire, WI 54702-1867  
<http://www.edp.net/~mceraso/ECARC.html>

### MEETING MINUTES October 14, 1997

VP Bert Spangler, W9ZZI, opened the meeting with a roll call. Secretary's and Treasurer's reports were read and approved.

It was announced that Dr. Harry Jol of the UWEC Geography Department would present a program during the November meeting. His subject will be Ground Penetrating Radar.

There was discussion of club approval of Hamfest prize purchases. Large manufacturer's discounts seem to be available this fall, and approval was given for the purchase of some three items, so that they may be listed on the Hamfest flyer, which is to be printed and distributed ASAP, so as to be delivered to the various area Hamfests.

Nominating committee members: KC9NN, WB9RBP, KB9PJM. The committee will report in November.

WD9HFT, Gale Sorum, representing a committee consisting of K9BDN, KE9KW, N9OHE, and himself, delivered a report which was essentially a look at the future planning and organization of the club. A survey and overview of the club and its activities, the report suggests a somewhat more structured handling of club operation than at present. Gale's report was well presented, and the members present expressed approval.

Jim Staats, WB9RBP, spoke at some length on the need for volunteers for club-related public service activities.

Lunch committee for the November meeting: W9BAR, KE9KW.

W9NW, Secretary



## SHEBOYGAN County Amateur Radio Club

Mike Musiel, KF9SJ, Secretary  
N9001 Dairyland Dr., Cleveland WI 53015

### MEETING MINUTES October 14, 1997

The October 14 meeting of the Sheboygan County Amateur Radio Club was called to order by Kurt, N9ZMO. The SCARC meets every second Tuesday of the month at the Red Cross building, 2032 Erie Ave. in Sheboygan at 7 p.m.

It is that time again to be thinking about who you would like to nominate for Ham of the Year. Penny, N9TCF, will be accepting nominations for the HOTY award.

In repeater news, Penny, N9TCF, also said that Lyle, WE9R, will be installing a temporary pre-amp on the repeater. The original pre-amp was damaged last summer during a storm, and had to be removed from the system.

The Flat Tube Award went to Larry Bahr, WB9FXQ, for getting the new club name tags done with help from his wife, Amy.

Art Pahr, K9XJ, gave an excellent DX and contest report, reminding everyone of the CQ WWDX-SSB contest on Oct 25 and 26. The DX and contest segment is becoming a regular feature at the SCARC meetings, and we appreciate Art's efforts in making these presentations.

Art is also coordinating VE testing in Sheboygan County and announced that the next VE test session will be Wednesday, November 19. Registration will be at 6:30 p.m. and the testing begins at 7:00 p.m.

Kurt, N9ZMO, thanked Lee and Josh, N9YLS and KG9BO, for their help in operating during the Old Plank Trail Health Classic hike. The club would like to thank all those who helped during public

service events during 1997.

The next fox hunt will be 1 to 3 p.m. November 8, with the fox being N9YLS/KG9BO. If you would like to participate and do not have any DF equipment, check in on the Monday night net, and we will try to team you up with a club member who does.

Refreshments were served. Thanks to Larry, WB9FXQ, for handling this important meeting function this month. (And thanks for taking the meeting minutes while I was on vacation this month.)

After the break, a presentation by Lee and Josh was given on APRS. A handout and actual computer set-up gave everyone a better understanding of it. Thanks for the interesting program.

The meeting was adjourned at 8:25 p.m.

The next general membership meeting will be November 11, 1997.

### NET SCHEDULES

7 p.m. Monday Nights, SCARC Fun Net, 147.06 PL 107.2, +.

Traders Net - Following the Monday night net on the first Monday of the month.

6:30 p.m. Thursday Nights, ARES Net, 147.255 PL 127.3, +, 444.175 PL 107.2 +.

We are happy to announce the return of the 10 net on 28.350 USB. This net has traditionally met at 7:30 p.m., following the Monday night 2 meter net. The 10 meter net may be moving to another night and time. Tune into the Monday night 2 meter net for further announcements.

Respectfully submitted:  
Michael J. Musiel, KF9SJ

## Washington County Amateur Radio Club

Continued from page 11

Badger State Smoke Signals will increase their annual subscription rate from \$8.40 to \$10.32. This would increase our dues from \$15.00 to \$17.00. Also some of the free subscriptions provided by BSSS were discussed and reviewed.

Dave, KA9RNU, reported that the Annual Banquet will be at Heidel's in Jackson on January 10, 1998. He passed out a survey to those members present to determine the menu for that night. Dave made a motion to pay Heidel's a \$100.00 deposit to reserve January 10th. The motion was denied because there was not enough members present to sustain the motion. (one-third of the membership is required to be present to have a motion

## Quarter Century Wireless Association Southeastern Wisconsin Chapter 162

Larry McCalvy, WA9JMO  
5400 Six Mile Road  
Radne, WI 53402



A bountiful banquet greeted our members and guests at LJ's Courtyard Cafe on the 19th of October as Chapter 162 hosted its annual meeting and election. The meal and fellowship was doubly enjoyable as the Chapter picked up the tab for the outing.

The election of three directors the conclusion of the meal highlighted our short business meeting. The members retained Bob Jensen, W0WLN, and elected Chuck Knotek, W9GKM, and George Pagels, K9AAL, for a two-year term. The three joined Bob Bergermeister, W9EH, Larry McCalvy, WA9JMO; Ed Konicek,

W9NVK, and Spencer Clope, W9LDH, on the Board of Directors. The Directors met and elected Spencer Clope, W9LDH, as President, George Pagels, K9AAL, as Vice-President and Bob Jensen, W0WLN, as Secretary/Treasurer. President Clope (the wily old fox) formally thanked Ken Knoff, N9NBC, for his service as past president and promptly appointed him as the Chapter's net control operator for our Thursday evening net. Those duties as far back as I can remember, always fell to the Chapter President. Spencer also wanted to thank Fern Fisher, W9LCJ, for serving as

a member of the board, but before he could, she split. Out of the building and onto other projects. So Fern, Spencer is saying, in print, thank you for your time, effort and talent given to our Chapter.

The traveling bug has been after several of our members. Bob, W0WLN, and Gladys Jensen headed for Rhode Island to enjoy the painted landscapes along the route. Bob had a hidden agenda for the trip, I find. The visit to Rhode Island coupled with and earlier adventure to Alaska marked the 49th and 50th of the United States he has traveled in.

Ken, N9NBC, and Marbeth Knoff combined an outing to QCWA's Golden Anniversary convention in Kansas City, Mo with a trip to the family's old farm homestead in Wyoming. Although the land is leased to a farmer of cattle, there are still a few odd jobs that crop up yearly that draw them back for a visit.

Herb, W9PHJ, and Ellanora Ladwig found a four day excursion to Woodruff,

WI much to their liking. I understand their time was spent carousing with the local Hams.

Chuck, W9GKM, and Marcy Knotek headed for the country: the country music offered in Branson, MO. The sights were grand, and the shows, I'm told, were outstanding.

Bill Komistra, W9OVZ, is still upon the ladder, I have been informed. Next month, I shall have all the details!!

73, Larry McCalvy, WA9JMO

Sick and tired of the proliferation of misguided (and usually not meeting FCC's or PRB-1's provisions) tower and RFI ordinances aimed at us? Become a Local Government Liaison. It's an ARRL field appointment. Yes, you CAN help! Get in touch with State Government Liaison Verne Teske, W9RYA, Oak Creek or SM Roy Pedersen, K9FHI.



## Taylor County Area Amateur Radio Club

Tom Hrdina, N9GEN, President

2373 Willow Avenue • Medford WI 54451

### MEETING ANNOUNCEMENT

The next regular meeting will be held on Thursday, November 6 at 7 p.m. in the Emergency Government meeting room located in the basement of the sheriff's annex to the Taylor County Courthouse, corner of 2nd and Ogden Sts., Medford, WI. Talk-in on the 147.15 Medford repeater (+600 kHz) or 146.52 MHz simplex.

### MEETING PROGRAM

Following the November club meeting, the program will cover Units 3 and 4 of the textbook for the "Hazardous Materials: A Citizen's Orientation" course that is being taken by several members of the club and area hams. However, those who have NOT enrolled in the course are still welcome to sit in on the sessions. This will take approximately 30 minutes to complete. All tests are open book and are done as a group. The course is intended to provide a general introduction to hazardous materials. NOTE: This program is a carry-over from last month's meeting, as Roland Sacho, Taylor County Emergency Management Director, was unable to attend the October meeting.

### CLARK/TAYLOR COUNTY AMATEUR RADIO EMERGENCY SERVICE (ARES) NEWS

Mike Schoenfuss, N9GHZ  
ARES Emergency Coordinator

Don't forget to try to check into the weekly ARES net held Wednesdays at 8:30 p.m. on the Medford repeater (147.75/147.15). If the repeater is down or not functioning properly, alternate frequencies, in order, are 147.15 MHz simplex and 146.52 MHz simplex. You're also encouraged to volunteer for net control duty for the net.

• Here are some important dates for 1997 to keep in mind, as they may likely generate requests for ARES communications, based on previous years:

December 6 - 26th Annual Abbotsford Christmas Parade, downtown Abbotsford

Mark your calendars now, so that you can keep some, or all, of these dates open.

• ARES radio communications were provided for the 4th Annual Highground Run/Walk, held on Saturday, 9/20/97 at The Highground Veterans Memorial just west of Neillsville, Wis. off of US Hwy. 10. Hams participating were N9ZLU (net control), KB9KFD and N9MHV. There were approximately 90 participants in the run/walk, and all but one completed the course. The run/walk started at 2 p.m. and was completed by 3:20 p.m.. The first ham radio operator was on-site before 1 p.m., and the last one left at 3:45 p.m.

• ARES radio communications were provided for the 8th Annual Buzzard Buster Mountain Bike Race, held on Sunday, 9/21/97 near Russell Park, near Hatfield, Wis. in southern Clark County. Hams participating were N9RRF, WB0KIN, KB9NMH and N9UWY. There were approximately 575 participants in the race. The race is one of 10 Wisconsin Off Road Series (WORS) events held at different sites in the state throughout the year. The event began at 12 p.m. (Noon), with ham radio operators on-site from 10 AM to approximately 4 p.m.

• ARES radio communications were provided during a gas leak in Greenwood, Wis. on 10/15/97. Twenty homes and 4 businesses were evacuated when a gas line ruptured in downtown Greenwood. Workers were installing an underground fiber optic line in an alley near the 100 block of Main St. at about 7:15 p.m. when they nicked a Wisconsin Natural Gas service line. The break sent natural gas spewing into the air, and the gas could be smelled half a block away.

Displaced people were sent to the Greenwood Elementary School, where a command post was set up to coordinate emergency services. The people were allowed to return to their homes at 8:45 p.m. There were no injuries reported. Clark County ARES personnel were contacted by Jan Brohm, Clark County Emergency Government Coordinator. Hams participating in providing communications included N9UWX (net control), N9RRF, N9MHV, N9UWY and N9ZLU.

### OTHER NEWS

• The next scheduled meeting of the Black River Wireless Assn.(BRWA) is Thursday, 11/13/97. The meeting starts at 7:15 p.m., is open to all area Amateur Radio operators, and will be held at the American Legion Hall in Loyal, Wis. □

## Red Cedar Repeater Association, Inc.

Steve Hart, KA9OMC, Secretary

E616 810th Avenue

Knapp, WI 54749

2-Meter Repeater: 146.01 Input/146.61 Output

Greetings, RCRA sponsors and guests.

The following were in attendance at our first fall social hour on September 23:

KA9PVY, Ken Reetz  
KF9CU, Arlene and OM Dave Kraft  
N9PPE, Jeff Cole  
WB9PMF, Tim Rose  
N9VOY, Bob Rose  
KA9OMC, Steve Hart

KA9PVY, Ken Reetz was the lucky winner of the free ticket to the Minnesota Hamfest and Computer Expo.

KF9CU, Arlene, and OM Dave, report son Steven, KE9RW, will be moving soon to Eden Prairie from Roseville.

KG9CT, Chuck Bricston, from Spring Valley, and his barbershop quartet, "The Midnight Watchmen", will be on WHWC, Wisconsin Public Radio, Saturday, October 25 at 7 p.m.

W5KNT, Ken Fosgate at Minong, has started his 13th year of the North Star Traders' Net on October 12. Ken and the gang swap and trade Sunday mornings at 8:30 a.m. on or around 3908 MHz, immediately following the Shrine Hospital net.

K9KGB, Bill Duncan, recently spent some time in the hospital, but reports he is back to being "Wild Bill" again, and suggests we all try to fix one thing every day. Sounds like good advice, Bill.

KB9NGE, Todd Holtzman at Wheeler, recently introduced Amateur Radio to his friend, Justin.

Wayne Johnson at Spring Valley, is working CW practice on simplex 146.55 MHz with K0LVA, Dick, at Roseville most weeknights after 9 p.m.

KB9KYC, Ben Cisek at Menomonie,

is cooking chef at Perkins between high school duties. Ben is also active in music, and is working on his CW.

N9KMY, Dave Kaun, has been working on the N9NHI repeater at Menomonie. Dave has acquired some solid-state gear and new controller to make some upgrades to the 146.205/.805 MHz system owned by Bill Bartko.

N0PDD, Bob Stark at Winona, has been helping KB9LUK, James Kinney at Eau Galle, get on packet radio. James is also interested in six meters.

It is that time of the year when we need to remind everyone of support renewal for the coming year. For those of you who receive *Badger State Smoke Signals*, your renewal is due now so that you will not miss any issues. Support for the repeater is at a suggested \$15 per user or \$20 for multiple amateurs under the same household. Add \$10 if you wish to receive a subscription to *Badger State Smoke Signals*. Your BSSS renewals must go through me, KA9OMC, Steve Hart, E616 810th Avenue, Knapp, WI 54749. Disregard any notices you receive directly from *Smoke Signals*.

Consignments to RCRA of equipment, aluminum can drive and saving UPC Shure Fine and Shure Fresh as well as Price Saver labels can also be applied toward your support pledge. Thank you for your support.

The last social hour for this year will be November 25 at 1414 9th Street, Menomonie at the Peppermill Restaurant in the L-Mart Shopping Center. Meeting time is 7:30 p.m. Bring a friend.

Happy Halloween! □

### MFJ INTERMOD™ FIGHTERS

Hear squeaks, squawks, bleeps, noises, paging tones and unidentified voices across the 2-meter band? They're caused by thousands of high-power TV and FM stations, and the result is "intermod" (intermodulation). The MFJ713/714 *IntermodFighters™* can eliminate intermod in your 2 meter handheld or mobile station. The MFJ713/714 filters attenuate out-of-band interference up to 50dB.

Thousands of high power TV and FM stations, paging, cellular, business, police, fire and other VHF high power transmitters can make your sensitive, ultra-wide-band 2 meter handheld or mobile useless.

Three high-Q bandpass filters and two L-sections give you razor-sharp selectivity. Interfering signals above and below 2 meters are vastly attenuated while leaving your desired signal. MFJ uses surface mount RF components for superb performance.

Intermod is eliminated during receive but, when you transmit, the filter is automatically bypassed.

MFJ-713, \$59.95. MFJ handheld *IntermodFighter™*. Has BNC connectors for HTs. Self-contained and uses 9-volt battery. To eliminate intermod, remove your HT rubber duck and replace with MFJ-713. Attach your HT antenna to MFJ-713. No more intermod!

MFJ-714, \$59.95. MFJ mobile *IntermodFighter™*. Plugs between your mobile rig and antenna coax. Has SO-239 connectors. Uses external 12 VDC.

Both units have On/Off switch and LED, power jack. Housed in RF tight, rugged aluminum case. The MFJ 713 and 714 come with MFJ's famous "no matter what" one year unconditional warranty. MFJ will repair or replace (at their option) for one complete year.

For your nearest dealer or to order, call toll-free (800) 647-1800. FAX: (601) 313-6551, or write to MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, MS 39759.

## New Products

### MFJ-270 LIGHTNING SURGE PROTECTOR

MFJ proudly announces the MFJ-270 *GuardianAngel™ Lightning Surge Protector* for 50Ω coax. It is priced at \$29.95.

Safeguard your expensive equipment from lightning-induced surges. Countless hams have watched their precious radio equipment destroyed by lightning induced surges traveling on their coax feedlines. Don't be the next victim!

Let the MFJ-270 safeguard your expensive radio equipment from damaging static electricity and lightning induced surges. MFJ's ultra-fast gas discharge tube safely shunts up to 5000 amps of peak impulse current harmlessly to an independent ground connection.

The MFJ-270 presents a constant 50Ω impedance to your transmission line. It has an SWR of less than 1.1:1 and an insertion loss of less than 0.1dB. The MFJ-270 can be used up to 1000 MHz and handles up to 400 watts PEP.

Your new MFJ-270 has SO-239 connectors and works with all types of coax fed antennas. It is made of heavy duty steel with quality connectors and components. The ultra-fast gas discharge tube is replaceable.

The MFJ-270 comes with MFJ's "no Matter What" limited warranty. MFJ will repair or replace (at their option) your MFJ-270 no matter what for one complete year.

Order today and protect your investment with the MFJ-270. Note: The MFJ-270 does not protect against a direct lightning hit. (And nothing will! BSSS editor's note.)

For your nearest dealer or to order, call toll-free (800) 647-1800; FAX (601) 323-6551, or write to MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, MS 39759.

Visit us on the Web:  
<http://www.mfjenterprises.com>

- MFJ Enterprises

## FCC SEQUENTIAL CALLSIGN UPDATE

The following is a list of FCC sequentially assigned call signs issued as of October 1, 1997.

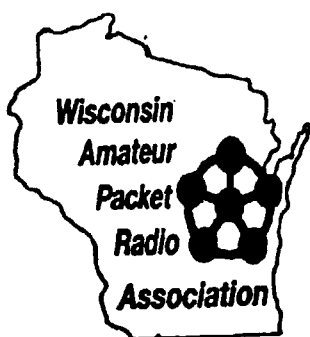
Dist	Group A Extra	Group B Advanced	Group C Tech/Gen	Group D Novice
0	AB0GH	KI0KE	++	KC0CAA
1	AA1SS	KE1IP	N1ZSQ	KB1CFD
2	AB2EH	KG2MP	++	KC2CLQ
3	AA3Q	KF3AJ	N3ZXI	KB3BVI
4	AF4FS	KU4LB	++	KF4UEF
5	AC5NX	KM5MG	++	KD5CIQ
6	AD6DF	KQ6RZ	++	KF6NTQ
7	AB7WM	KK7KB	++	KC7ZHD
8	AB8BG	KI8DU	++	KC8IOH
9	AA9UY	KG9LK	++	KB9RLN
N Mariana Is	NH0B	AH0AY	KH0GT	WH0ABI
Guam	++	AH2DE	KH2SL	WH2ANV
Hawaii	AH7V	AH6PD	KH7GU	WH6DEI
Amer Samoa	AH8P	AH8AH	KH8DK	WH8ABF
Alaska	AL0F	AL7QU	KL0KK	WL7CUM
Virgin Is		KP2CM	NP2JT	WP2AIJ
Puerto Rico	NP3O	KP3BC	NP3RE	WP4NNM

++ All call signs in this group have been issued in this district.

The ARRL Letter, 10/24/97

Is BSSS looking a bit "generic" to you? It is to me. We are not getting enough Wisconsin area news and information, including features and photos. Many promise, but few deliver. Can we switch that phrase around? It's up to you, our readers. We especially need features about young to middle age amateurs and their interests in and outside the hobby. Of the stories with photos we get, most are about hams over 55, leaving younger readers with the impression that ham radio is a hobby only for older folks. It is not, but our submitted local stories give that appearance. Let's try to correct that misimpression, OK? Thanks!

Jim, K9ZZ



# THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association  
Bob Gedemer, KA9JAC  
609 Wilson Street • Neenah, WI 54956

Andy Nemec, KB9ALN, Editor • 720 N. Broadway (Upper West) • Green Bay, WI 54303

## WAPR News - October, 1997

Hello again, everybody. Hope the fall is treating you well and you took advantage of the warmer part of October. Winter makes it's way toward us, and I'm sure not too many of us are ready for it yet. I know I'm not!

In spite of that, I will tell you that it was good to see the brave souls that showed up for our fall meeting held in Ashwaubenon. We got to talk packet and have a good 'ol time playing with TCP/IP at our seminar afterwards.

Speaking of the seminar, one of the participants noted that there was a lot of information presented, and there is "quite a bit to remember". Yes, and there was at least one person who was unable to attend, but really did want to. Because of this, I have decided to put the contents of the seminar on our WWW page. For those of you who are interested, please be patient. It will take me the better part of a month or two to get it ready. When it is there, I will let you know.

Speaking of TCP/IP, I got to spend a day with Al, KB9BYQ, Steve, N9SGG, and John, N9RJZ. Those of you who are regular readers may remember mention of an internet gateway in Appleton. Well, John is the owner/operator of the 'gate, Steve and Al also help with configuration and operation. They have all been working hard (with the usual lack of current documentation :) to get it operating smoothly. The machine that operates the gate, for those of you who are interested, is a 486 using Linux as an operating system (UNIX for PC's). One of the programs running on Linux is TNOS, the Tampa variety of NOS. Ultimately, a user will be able to connect up to John's TNOS station via radio and then access the internet very easily. While not quite through as of this writing, it is awfully close. I will probably devote one of the "Using the Wisconsin Network" articles to instruct users on the operation of the gate. Stay tuned, as they say.

On to the next: You will find the long-promised June 1997 WAPR meeting minutes published here. In addition, you will find the meeting minutes from our October 11th meeting. You will note that the June minutes have had the requested changes made for publication, with the complete terminology in parenthesis.

You will also note that at the June meeting, which I was unable to attend, a request was made to have the By-Laws of WAPR published here, in the Badger State Smoke Signals. Because I wanted to publish the meeting minutes, we will not have quite enough space to do it this month. Barring anything unusual coming up, they will appear in next month's issue.

That's it for this month. Have a happy Thanksgiving and until next time, 73 from Andy.

Andy Nemec  
andy@hardware.cae.wisc.edu  
Amateur Radio: kb9aln.ampr.org

## June 1997 WAPR Meeting

Called to order at 10:55 by N9BQM

The minimum number was present to form a quorum. Voting on officers took place. The following were elected for the 97-98 year:

N9BQM Chairperson  
N9CFN Vice Chair  
KB9ALN Secretary  
KA9JAC Treasurer  
KE9LZ Director (at large)  
WD9ESU Director (at large)  
KF9XX Director (at large)

Treasurers report was approved as written.

Old business:

Bylaws should still be sent to members as they renew or join. They are also available on the web at: netnet.net/~ke9lz Also ask Andy to have them published in BSSS.

> From the last meeting, discussion on Timm's Hill: Contract has been signed between WAPR and Georgia Pacific, N0GMJ is to pay the site fees. Some equipment is still required to get this site up and operating.

N9BQM stated that there are 3 MFJ 1200 baud tnc's available.

KF9XX Stated they are waiting for tnc and radio for the high ground project.

Question: Is this site to be for just dx cluster or will all traffic have a route?

Answer: The dx group is looking for an alternate route, but the system should be able to support all traffic if the links are setup properly.

New business:

Discussion concerned how the links are set up and what is necessary to improve them. Discussion was tabled for further discussion at later date.

Meeting was adjourned at 1:20

Andy Nemec  
andy@hardware.cae.wisc.edu  
Amateur Radio: kb9aln.ampr.org

## WAPR Meeting Minutes - October 11, 1997

Meeting called to order at 10:30 A.M. by Joel, N9BQM.

Attendance: AA9AW, KA9ZZK, N9CFN, N9ZDA, N9PAV, KB9MWR, KB9ALN, W9CEA, KA9VRK and N9BQM.

1) Minutes from June Meeting read. 2) Discussion as to the proper terminology for "at-large" directors". In order to avoid confusion, we will refer to these "at-large members" as "directors". A brief side discussion ensued regarding these members being referred to as the "technical committee", it was determined that at-large directors are not necessarily members of the technical committee. 3) Motion to approve meeting minutes as amended (refer to at-large members as "directors"). 4) Quorum is present. 5) Treasurer's report not available.

Old Business:

6) Nielsville site "High Ground": Should be up soon and will be tested by the people with the best access to it.

New Business:

7) Discussion about N9QIP's new node to be installed at Fon- Du- Lac. This will be on 446.100. While there are concerns about Hidden Transmitter Syndrome with so many nodes on this frequency, we observed that this new node will solve more problems than it is likely to create. It was also noted that KE9LZ has eventual plans to construct a digital regeneration repeater on a different frequency. This would serve the northeastern part of the state, and would be on a different frequency. A digital repeater will reduce the possibility of Hidden Transmitter Syndrome and alleviate

possible crowding on 446.100. 8) Additional discussion about the fact that it has been quite a while since the northeast and southwest portions of the state have been connected. 9) Short discussion about the various packet organizations and getting them to all work together. 10) Discussion of the importance of frequency coordination. There has been considerable growth of the backbone system in the state. The concern is that uncontrolled and uncoordinated growth will be detrimental to the packet system, no matter who is using it. 11) In order for effective coordination to occur, there should not be the segmentation and segregation of various factions.

No other business was presented, and the meeting was adjourned at 11:14, followed by a TCP/IP seminar.

Andy Nemec  
andy@hardware.cae.wisc.edu  
Amateur Radio: kb9aln.ampr.org

## Using the Wisconsin Network

### Part 33 by Andy Nemec, KB9ALN

Last time, we started a discussion about the types of things an Emergency Coordinator or Radio Officer has to think about before planning to use packet in their operations. In this part of the series, we will talk about the actual planning, once you find a niche for it in your ARES and/or RACES system.

Last time, we talked about the types of emergencies, and the types of operations you are likely to encounter. An EC probably already has a very good idea of what is expected of his or her organization. We will assume, for the moment, that we are dealing with a fairly common scenario in Wisconsin. This county is mostly rural, with one smaller city and a number of smaller towns and villages. While Milwaukee county may be the exception to this usual scenario, some of the same basic rules apply, the system is bigger and more complex there.

From what we know of our county, we can prepare for flooding, hazardous chemical spills from either rail or trucking, possible severe weather, and potential of a large fire, perhaps. In the right circumstances, any one of these can mean mass evacuation, mass casualties, or both.

Anytime we are dealing with this type of scenario, the Red Cross is likely to become involved. Here is a very good place for packet radio. In addition to communications between the on-site Red Cross staff and other agencies, there could be utility in having an operator at the Red Cross

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ADDRESS: \_\_\_\_\_ CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

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Your HOME BBS should be a full service BBS, not your TNC's mailbox.

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Bob Gedemer KA9JAC/WAPR  
609 Wilson St.  
Neenah, WI. 54956-3129



Chapter office.

A Red Cross shelter would be a great place for a portable station. If there is a possibility of a large-scale disaster and multiple shelters, then more portable stations would be handy.

You also know you will need communications between the on-site Incident Command Post and the Emergency operating center.

If your county has a mobile communications center, a permanent installation is ideal. An older laptop (8088 even) will do fine in such an installation. In fact, none of the computers need be exotic if you are doing basic packet radio. When starting an emergency packet setup from scratch, it is best to "Keep it Simple,..."

The RF portion will require some testing and perhaps even a little experimentation. How far away will you be from a network node (or something suitably similar) is a big determining factor when you start to look at radios and power levels.

The installation itself will also dictate what you use for equipment. For example, you would not want to use a high-powered radio in a mobile communications van. This radio will also be subject to interference from other radios. You may wish to investigate using a surplus commercial radio (Motorola or G.E.). They are generally far better performers in a bad radio environment and are not too expensive. In any case, do make certain the radio is easy to operate.

The TNC is something you can be a little flexible on. There are two considerations here. One is to look for ease of future upgrading. Just how exotic are you likely to get with the system? If you need expandability (for adding APRS, for example), stick to a TNC that is TNC-2 compatible. You might also think about what might be the most popular TNC in your area. It makes sense to select one in wide use. It would be more likely to be familiar to the packet operators. Less time trying to figure out a given TNC is more time spent operating.

The same can be said of software. Field units should use the simplest possible software. Again, familiarity works in your favor. If everybody in town uses Hostmaster, then you should consider it. In general, it is not a good practice to use a complex program like PaKet on a remote or portable station, there is too much to go wrong for the novice user.

Exotic services provided by a station at the EOC or elsewhere need to be carefully thought out. How likely is a whiz-bang service to be used? If it is absolutely necessary to make your job easier, do try to use and implement it in the simplest way possible.

In addition to all of the planning mentioned before, these things need to be mentioned:

1) Keep it as simple as you can. 2) Stay in regular contact with your local Node Operator. Find out what his plans are for the future. Does he have emergency power? Are there any plans he or she is making that would affect your equipment purchases? 3) Try and utilize what you already have, rather than building an entire network around your needs. If you have trouble accessing the network in any of your county, consider looking for a packet operator in that area who can activate his KA-Node (or digi as a last resort). See if he is capable of operating on emergency power. If not, see what you can do to help him with this. 4) While a lot of us are quick to offer help, not many of us are good at asking for it. If this packet game is kind of over your head right now, delegate! Find a practical minded person to head up this project, and get acquainted with the project and packet. 5) Once you have a system in place, use it. Incorporate it into your routine operations as well as your drills, if you can. 6) Make it a point to find a path to the Wisconsin Division of Emergency Management ham station through the network. It is a BBS with the call-sign of WC9AAG, alias of WIDEM. Once you get registered, leave a message with Mack, N9NTB telling him you are packet-ready. Introduce yourself, and leave instructions on the path used to get to your local LAN, as well as a BBS (or mailbox) where mail can get your mail. This will help the packet operators in Madison should they need to get a hold of you, and they can put that BBS in their forwarding files. 7) Support packet radio networking whenever possible. Remember, the more developed a network becomes, the more useful it will be to you.

Hope this helps as a guide to planning the packet-based part of your emergency communications system. Next time, we will look at incorporating APRS into the system. We'll discuss what it is and if it can be useful to you.

Until then, 73 from Andy.

Andy Nemec

andy@hardware.cae.wisc.edu

Amateur Radio: kb9aln.ampr.org



## Yellow Thunder Amateur Radio Club

WB9FDZ (Original Club Call)  
K9ODK (Robert L. Prine Memorial Call)

Raymond J. Matlosz, N9MLZ, Secretary  
450 West 2nd Street • Reedsburg, WI 53959



The October 14, 1997 meeting of the Yellow Thunder Amateur Radio Club, Inc. was called to order at 7:40 p.m. by Steve Schulze, N9UDO. The September 18th minutes were approved as printed in BSSS. There was no treasurer's report.

OLD BUSINESS: Art Kleefisch, W9WSS and Peter Sweeney, WD9JIB reported on their participation in the Sauk County disaster drill held in Baraboo on September 20. They and one other ham participated. Pete thought the exercise went well and their efforts were both noted and appreciated by powers that be, but not necessarily by the news media (which didn't mention them at all). Pete expressed a need to have at least five members participate in any upcoming drills.

Members present voted to keep the present officers: Steve Schulze, N9UDO as president; Bill Hommel, KA9QFJ as VP; Raymond (I won't run again) Matlosz, N9MLZ, secretary and Jim Decker, WB9UQT, treasurer (with Bill Klinkner, N9KXX, alternate).

NEW BUSINESS: Discussed the Holiday Party in December. Bill Klinkner will check out the new Highway House for availability on either the 5th or 19th. Dues will be due in January. Steven Schwoegler, K9WD announced license exams will be given November 1 in Wisconsin Dells at the American Legion building. The question was asked if the club should meet on one specific date (i.e. every third Tuesday of the month) or keep it's rotating schedule as it is now. Not all present were in favor of changing the current schedule. The secretary was directed to review the attendance for each meeting for the previous

year and the officers were asked to review the by-laws regarding the meeting dates.

Buck Night: it was decided that Ken Johnson, K9DZG would win and then graciously donate the money to the Field Day Refreshment Fund. He wasn't so sure about all this, but he agreed to win and return the money to the fund. Thank you Ken.

NEXT MEETING: Wednesday November 12, 1997 at 7:30 p.m., room 14, Baraboo Civic Center.

Sincerely,

Raymond J. Matlosz, N9MLZ  
Club Secretary

The following members and non members were present:

Joe Rowland	N9PRF	Portage
George G. Gabay	N9QQR	New Lisbon
Dave Spearing	KB9CSW	Portage
Ken Johnson	Kk9DZG	Mazomanie
Art Kleefisch	W9WSS	Baraboo
Jim Paul	N9LKY	Baraboo
Thomas Harrison	N9PQJ	Reedsburg
Steve Schulze	N9UDO	Baraboo
Raymond Matlosz	N9MLZ	Reedsburg
Steven Schwoegler	K9WD	Wisconsin Dells
Brad Pointon		Baraboo
Peter Sweeney	WD9JIB	Reedsburg
Anne Klinkner	N9PQL	Sauk City
Bill Klinkner	K9KXX	Sauk City

### THE TEST POINT (continued from page 3)

See the Swapfest column for additional information and contact persons.

DUBUQUE, IA - ARRL/VEC  
Dubuque Hamfest. Contact: Carl Clark, N0KAX, 2145 Delicia Drive, Dubuque, IA 52001. (319) 557-9149.

LOVES PARK, IL Third Saturday of every month. Northern Illinois Volunteer Examiners (W5YI VEC). Held at North Suburban District Library, 6340 North Second St. (Hwy. 251), Loves Park, IL. Contact: Dennis G. Eksten, W9SS, (815) 877-6768.

MINNESOTA TEST INFORMATION  
From "The Ground Wave", Saint Paul Radio Club.

Saint Paul Radio Club (SPRC)  
Contact: Jay Bellows, K0QBE (612) 222-7253  
Test Site: St. Paul Technical College  
235 Marshall Ave.  
St Paul, MN  
TESTING: First Saturday of the month, 8:30 a.m.

Anoka Amateur Radio Club (AARC)  
Contact: Joe Wivoda, N0AU, (612) 753-6481  
Test Site: Blaine City Hall  
9150 Central Ave NE  
Blaine, MN  
TESTING: Second Saturday of the month, 9:00 a.m.

Bloomington Office of Emergency Management  
(Bloomington Amateur Radio Club (BARC))  
Contact: Dan Royer, KE0OR (612) 888-9756  
Test Site: Creekside Community Center  
98th & Penn Avenue S  
Bloomington, MN  
TESTING: Fourth Saturday of the month, 9:00 a.m.

Valley Amateur Radio Club (VARC)  
Contact: Bill Martin, KA0CIR (612) 432-0438  
Test Site: Hayes Community Center  
14601 Hayes Road  
Apple Valley, MN  
TESTING: Second Thursday of the month 7:00 p.m.

W5YI  
Contact: Dave Ranney, N0AXL (612) 571-7441  
Test Site: Eden Prairie Library  
479 Eden Prairie Drive  
Eden Prairie, MN  
TESTING: Third Tuesday of the month 6:30 p.m.

SE Metro Area Radio Club (SEMARC)  
Contact: Dave Harrell, N0IPN (612) 459-8678  
Test Site: Cottage Grove fire Station

8641 80th ST., S  
Cottage Grove, MN  
TESTING: Third Saturday of the month, 9:00 a.m.

The above information has been furnished by the various VEs. However, it is suggested that you confirm time, date and location BEFORE you make the trip to the test site. Occasionally, a test may be canceled and/or dates and locations changed. A Phone call could save you some grief and a wasted trip.

This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules. Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN at the address shown on page 2.



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## SWAPFESTS



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JANUARY 11, 1998**

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Steven D. Miller, KB9DPE  
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Amy L. Tlachac, N9TLN  
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P. O. Box 8890 Madison, WI 53708-8890  
Swapfest Information Line: (608) 245-8890

SOUTH MILWAUKEE AMATEUR RADIO CLUB

**SWAPFEST 98**

**July 11, 1998**

(Held every July)

**American Legion Park**

**Shepard Avenue • Oak Creek, WI**

(414) 762-3235

P. O. Box 102

Extension 58

South Milwaukee, WI 53172

**Fox Cities Hamfest**  
**Sunday, November 2, 1997**  
Starlite Club, Hwy. 55 north of Kaukana

HAMFEST INFO:

Chad Penrings, N9PRC  
1912 Russett Ct., Apt. 7  
Appleton, WI 54914  
(920) 993-0485

EXAM INFO:

Larry Siebers, KD9IA  
(414) 759-1167

**Lakeshore Hamfest**  
and Computer Swapfest  
**Manitowoc County Expo**

Intersection of Hwys. 42-151 and I-43 on Cty. Hwy. R

**Saturday, May 9, 1998**

For more information, call:

Glenn, AA9MT: 920-684-7096

Red, N9GHE: 920-684-9097

ManCoRad Radio Club • P.O. Box 204 • Manitowoc, WI 54221-0204

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E-MAIL: jfw9jnp@tznnet.com

Eau Claire Amateur Radio Club

**SWAPFEST**

**Saturday, July 11, 1998**

**Eau Claire County Fairgrounds**

Intersection of Highways 93 and I-94

Carol Ceraso • (715) 723-9205 Liz Seasing • (715) 834-1303

P.O. Box 1867 • Eau Claire, WI 54702-1867

<http://www.ecarc.org>

**RACINE HAMFEST 97**  
**Sunday, July 27, 1997**

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Ozaukee Radio Club

**20TH ANNUAL RADIO AND  
COMPUTER SWAPFEST**  
**Saturday, May 2, 1998**

8 a.m. to 1 p.m. • Circle B Recreation Center

Intersection of Highway 60 and County I

Exams by Badger Examiners, c/o Gary Sharbuno,

5119 W. Willow Rd., Brown Deer, WI 53222

Swapfest sponsored by the Ozaukee Radio Club

W58 N985 Essex Drive, Cedarburg, WI 53012-1439

Adams County Amateur Radio Club

**SPRING HAMFEST**

**Sunday, June 7, 1998**

**(NOTE DATE/YEAR CHANGE)**

**Adams County Fairgrounds**

West of Hwy. 13 on Cty. J • Friendship, WI

Adams County Amateur Radio Club P. O. Box 232  
Friendship, WI 53934 Nick Segina, WB9YKK, (608) 339-9014

Packet: N9TD-1 on 145.03

Red Cedar Repeater Association, Inc.

**AUCTION**

**February 24, 1998 • 7:00 p.m.**

**American Legion Post 53 • 634 Water Street**

**Eau Claire, WI**

CONTACT:

Steve Hart, KA9OMC  
E616 810th Ave.

715-665-2374

Knapp, WI 54749

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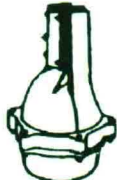


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